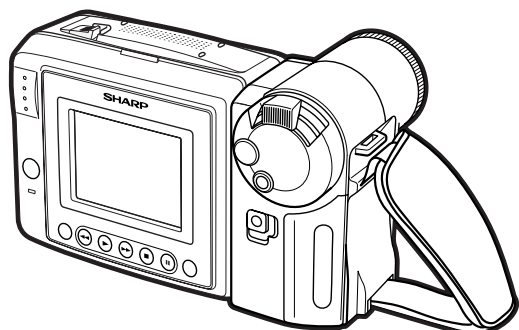


SHARP SERVICE MANUAL

S10U5VL-AH30U

LIQUID CRYSTAL CAMCORDER Hi **8** NTSC

VL-A10U/UC/UA/UW
VL-A10T/K
MODELS VL-AH30U/UC/T

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified be used.

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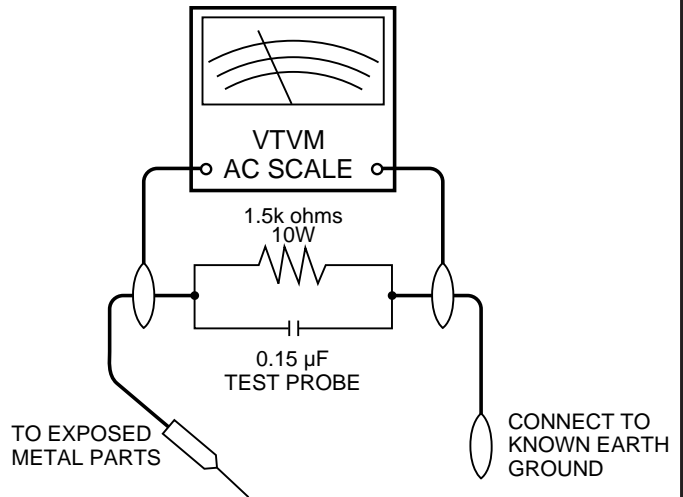
1. IMPORTANT SERVICE NOTES

BEFORE RETURNING THE VIDEO CAMERA RECORDER

Before returning the video camera recorder to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the video camera recorder.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor/capacitor networks, mechanical insulators etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.
 - Plug the AC line cord directly into a 120 volt AC outlet (Do not use an isolation transformer for this test).
 - Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15 μ F capacitor in series with all exposed metal cabinet parts and a known ground, such as a water pipe or conduit.
 - Use a VTVM or VOM with 1000 ohm per volt, or higher sensitivity or measure the AC voltage drop across the resistor (See Diagram).
 - Move the resistor connection to all exposed metal parts having a return path to the chassis (antenna

connections, metal cabinet, screw heads, knobs and control shafts, etc.) and measure the AC voltage drop across the resistor. Reverse the AC plug (a non polarized adaptor plug must be used but only for the purpose of completing these checks) on the set and repeat the AC voltage measurements for each exposed metallic part. Any reading of 0.45V rms (this corresponds to 0.3mA rms AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the video camera recorder to the user.



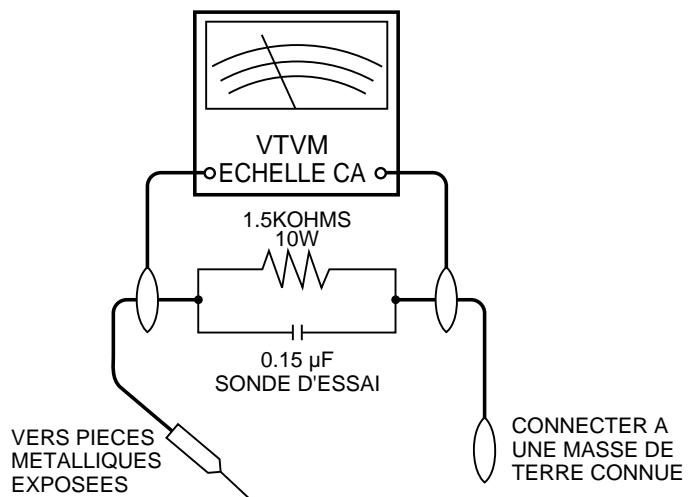
1. NOTES DE SERVICE IMPORTANTES

AVANT DE RENDRE LE MAGNETOSCOPE

Avant de rendre le magnétoscope à l'utilisateur, effectuer les vérifications de sécurité suivantes.

1. Vérifier toutes les gaines de fil pour être sûr que les fils ne sont pas pincés ou que le matériel n'est pas coincé entre le châssis et les autres pièces métalliques dans le magnétoscope.
2. Vérifier tous les dispositifs de protection tels que les boutons de commande non métalliques, les matériaux d'isolement, le dos du coffret, les couvercles de compartiment et ajustement ou les boucliers, les réseaux de résistance / condensateur d'isolement, les isolateurs mécaniques, etc.
3. Pour être sûr qu'il n'y a aucun risque de choc électrique, vérifier le courant de fuite de la manière suivante.
 - Brancher le cordon d'alimentation secteur directement dans une prise de courant de 120 volts. (Ne pas utiliser de transformateur d'isolement pour cet essai).
 - Utiliser deux fils à pinces et connecter une résistance de 10 watts 1,5 kohm en parallèle avec un condensateur de 0,15 μ F en série avec des pièces du coffret métallique exposées et une masse de terre connue telle qu'un tuyau ou un conduit d'eau.
 - Utiliser un VTVM ou VOM avec une sensibilité de 1000 ohms par volt ou plus ou mesurer la chute de tension CA entre la résistance (voir diagramme).
 - Déposer la connexion de la résistance à toutes les pièces métalliques exposées ayant un parcours de

retour au châssis (connexions d'antenne, coffret métallique, têtes de vis, boutons et arbres de commande, etc.) et mesurer la chute de tension CA entre la résistance. Inverser la fiche CA (une fiche intermédiaire non polarisée doit être utilisée à seule fin de faire ces vérifications.) sur l'appareil et répéter les mesures de tension CA pour chaque pièce métallique exposée. Toute lecture de 0,45 V rms (ceci correspond à 0,3 mA rms CA) ou plus est excessive et signale un danger de choc qui doit être corrigé avant de rendre le magnétoscope à son utilisateur.



WARNING :TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO WET LOCATIONS.



CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK. DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol warns the user of uninsulated voltage within the unit that can cause dangerous electric shocks.

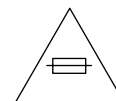


This symbol alerts the user that there are important operating and maintenance instructions in the literature accompanying this unit.

CAUTION

This symbol mark means following.
For continued protection against fire hazard, replace only with same type fuse.
(CP901; 2.5A 64V, CP902; 2.5A 64V, CP903; 2.5A 64V)

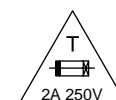
Camcorder only



CAUTION

This symbol mark means following.
"RISK OF FIRE—
REPLACE FUSE AS MARKED."
(F101; 2A 250V)

AC Adapter only



ATTENTION: POUR REDUIRE LES RESQUES D'INCENDIE OU DE CHOC ELECTRIQUE, NE PAS EXPOSER CET APPAREIL A LA PLUIE OU A L'HUMIDITE.



ATTENTION

**RISQUE DE CHOC ELECTRIQUE
NE PAS OUVRIR**



ATTENTION: AFIN DE REDUIRE LES RISQUES DE CHOC ELECTRIQUE, NE PAS RETIRER LE COUVERCLE, AUCUN ORGANE INTERNE NE PEUT ETRE REPAIRE PAR L'UTIUATEUR, CONFIER L'APPAREIL A UN DEPANNEUR QUALIFIE.



Ce symbole signale à l'utilisateur la présence d'une tension non isolée à l'intérieur de l'appareil qui peut être la cause de secousses électriques dangereuses.

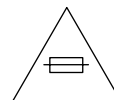


Ce symbole avertit l'utilisateur que des instructions importantes relatives à l'utilisation et à l'entretien se trouvent dans le manuel accompagnant l'appareil.

ATTENTION

Ce symbole signifie que l'on devra utiliser un fusible de même type (CP901; 2,5A 64V, CP902; 2,5A 64V, CP903; 2,5A 64V) pour assurer la sécurité.

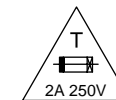
Camcorder seulement



ATTENTION

La signification de ce symbole est la suivante.
"RISQUE D' INCENDIE – REMPLACEZ LE FUSIBLE SELON L' INDICATION."
(F101; 2A 250V)

Adaptateur CA seulement



 **CAUTION**
BEFORE BATTERY DESTROY

■ **NICKEL-CADMIUM BATTERY**

The following program is available in the United States. Please consult local environmental authorities concerning the availability of this or other programs in your area.

The RBRC™ Seal

SHARP participates in the RBRC™* Nickel-Cadmium Battery Recycling Program in the United States. The RBRC™ Seal on our battery pack contained in our product indicates that SHARP is voluntarily participating in an industry program to collect and recycle these batteries. The RBRC™ program provides you with a convenient alternative to placing spent Nickel-Cadmium battery packs into the trash or municipal waste stream, which is illegal in some areas. At the end of their useful life, the Nickel-Cadmium battery can be dropped off at the nearest collection center for recycling. For information on the nearest collection center, call 1-800-8-BATTERY or your local recycling center. If you are located outside the United States, contact your local authorities for information concerning proper disposal and/or recycling of this battery. SHARP's involvement in this program is part of our commitment to protecting our environment and conserving natural resources.

[Footnote] *RBRC™ is trademark of the Rechargeable Battery Recycling Corporation.

■ **NICKEL-METAL HYDRIDE BATTERY**

■ **LITHIUM or LITHIUM-ION BATTERY**

■ **SEALED LEAD BATTERY**

Battery disposal

Contains the above (Rechargeable) Battery. must be recycled or disposed of properly.

Remove the Battery from the products and contact Federal or State Environmental Agencies for information on recycling and disposal options.

2. SPECIFICATIONS

Signal System: NTSC standard
 Recording System: 2 rotary heads, helical scanning system
 Cassette: 8 mm video tape, MP type or Hi8 MP, ME type
 Recording/Playback Time: 120 minutes (P6-120)
 Tape Speed: 14.345 mm/second
 Pickup Device: 1/4" (6.4mm, effective size: 4.5 mm) CCD image sensor (with approx. 270,000 pixels including optical black)
 Lens: 16 × power zoom lens (F1.4, f=4.0-64.0 mm), and full-range auto focus
 Lens Filter Diameter: 46 mm
 Monitor: 3" (7.5 cm) full-color LCD screen (TFT active matrix)
 Microphone: Electret monaural microphone
 Color Temperature Compensation: Auto white balance with white balance lock
 Minimum Illumination: 0.8 lux (5 lux measured by EIA standard)(with gain-up, F1.4)
 Video Output Level: 1.0 Vp-p 75-ohm unbalanced
 Audio Output Level: -8 dBs, impedance less than 2.2 kohms
 Speaker Output: 200 mW
 Power Requirement: DC 3.6V (with battery pack)
 DC 7.0V (with AC adapter)
 Power Consumption: 5.1W (during camera recording in full auto mode with zoom motor off and backlight in normal mode)
 Operating Temperature: 0°C to + 40°C(32°F to 104°F)
 Operating Humidity: 30% to 80%
 Storage Temperature: -20°C to +60°C(-4°F to 140°F)
 Dimensions (approx.): 7 ⁷/₃₂" (W) × 4 ⁹/₃₂" (H) × 3 ⁷/₈" (D)
 [183 mm (W) × 109 mm (H) × 99 mm (D)]
 Weight (approx.): 1.54 lbs (700g)
 (without battery pack, lithium battery, video cassette, and lens cap)

AC Adapter/Battery Charger

UADP-0312TAZZ

(VL-A10U/UC/T/AH30U/UC/T)

UADP-0313TAZZ

(VL-A10UA/UW)

Power Requirement: AC 110-240 V, 50/60 Hz
 (CSA certifies AC 120 V only)
 DC Output: 7.0 V
 Power Consumption: 15 W
 Dimensions (approx.): 2 ¹¹/₁₆"(W) × 1 ¹⁵/₃₂"(H) × 5 ¹⁸/₁₃"(D)
 [68 mm (W) × 37 mm (H) × 137 mm (D)]
 Weight (approx.): 0.68lbs (308 g)

Battery Pack BT-H22

DC Output: 3.6V
 Dimensions (approx.): 2 ¹/₈" (W) × ³/₄" (H) × 2 ⁷/₃₂" (D)
 [54 mm (W) × 19 mm (H) × 56 mm (D)]
 Weight (approx.): 0.30 lbs (136 g)

Specifications are subject to change without notice.

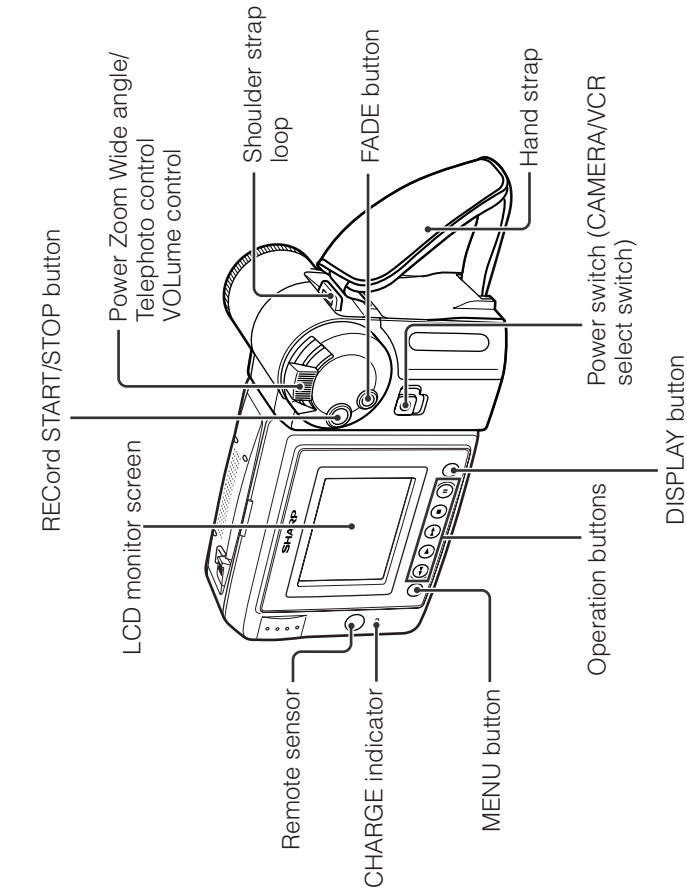
SERVICE INFORMATION (For the U.S.)

For the location of the nearest Sharp Authorized Service, or to obtain product literature, accessories, supplies or customer assistance, please call 1-800-BE SHARP (1-800-237-4277) or visit SHARP's website (<http://www.sharp-usa.com>)

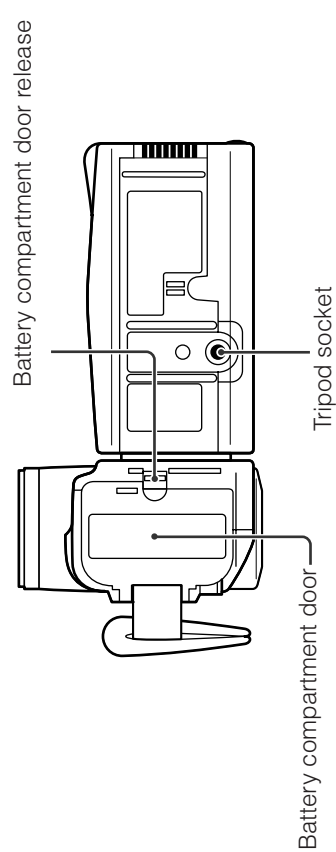
3. PART NAMES AND FUNCTION

For details on the use of each control.

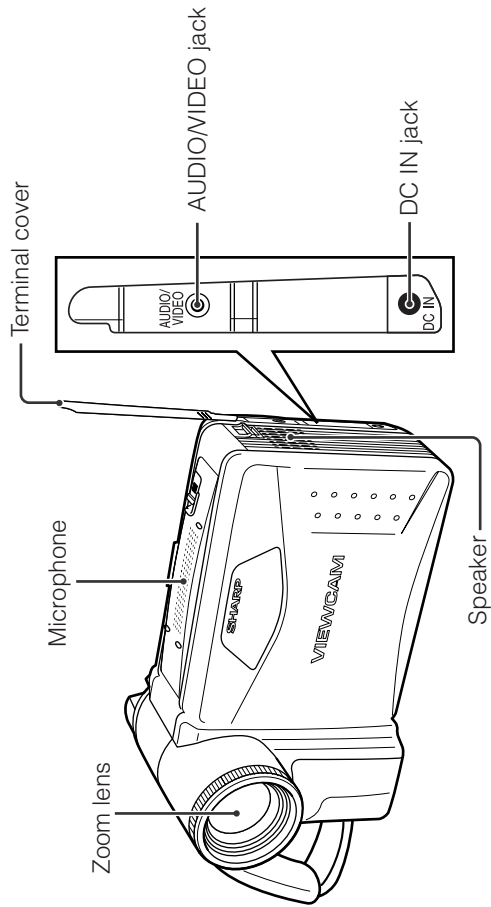
Rear view



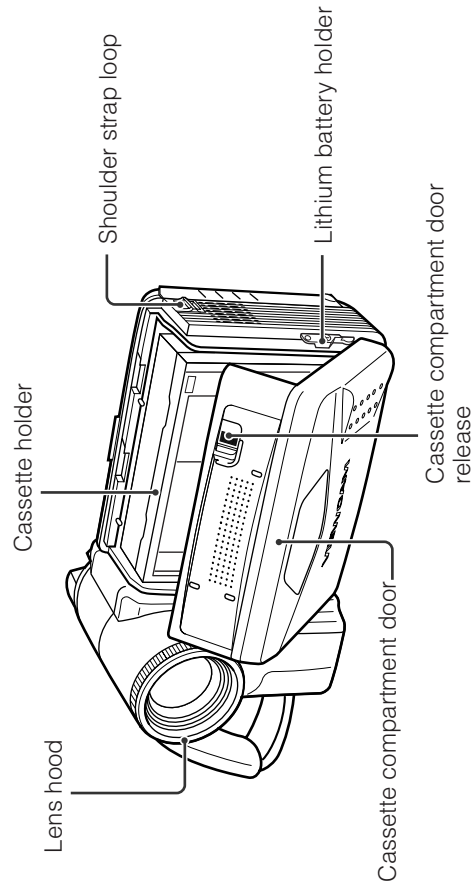
Bottom view



Front view



When the cassette compartment door is open

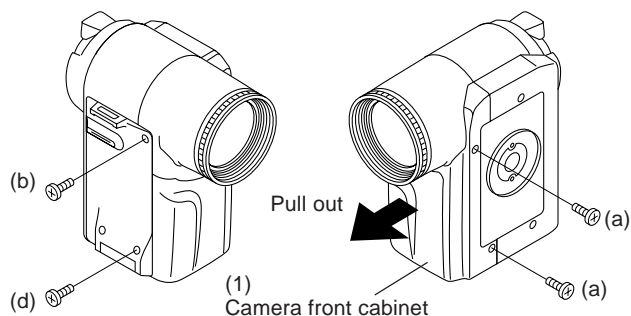


4. DISASSEMBLY OF THE SET

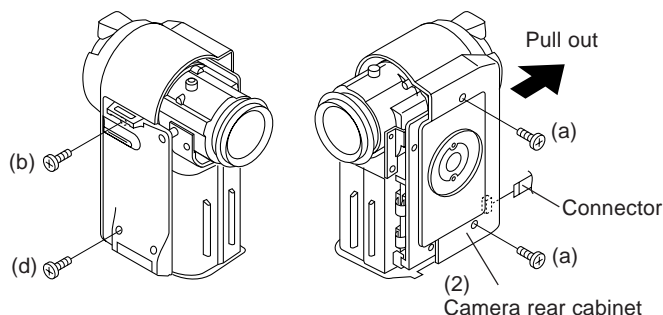
4-1. REMOVAL OF THE CAMERA SECTION

Note:

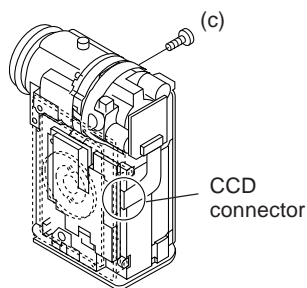
Before removing the cabinet, turn off the power supply, and ascertain that the battery has been removed.



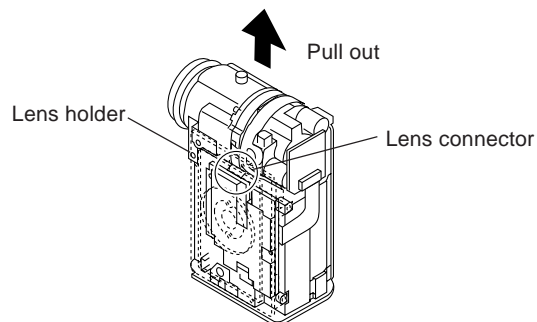
1. Remove one screw ((d)XiPSF20P04000), one screw ((b)LX-HZ0018TAFN), two screws ((a)LX-HZ0018TAFN), and pull out the camera front cabinet (1).



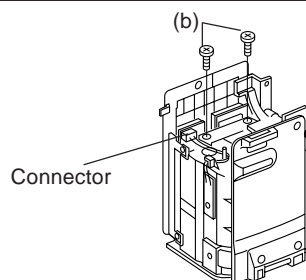
2. Remove one screw ((b)LX-HZ0018TAFN), one screw ((d)XiPSF20P04000) and two screws ((a)LX-HZ0018TAFN) and pull out the camera rear cabinet (2) backwards. Remove the FPC in the camera rear cabinet.



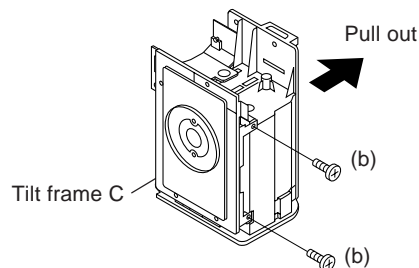
3. Firstly, remove the CCD connector from the Camera PWB, then remove one screw ((c)LX-HZ0045TAFN), the reverse side in this figure (Not remove the lens holder in this section).



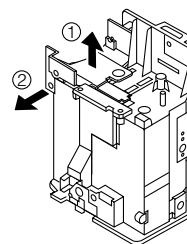
4. Pulling the lens holder, and pull out the lens upwards. Then, remove the lens connector.



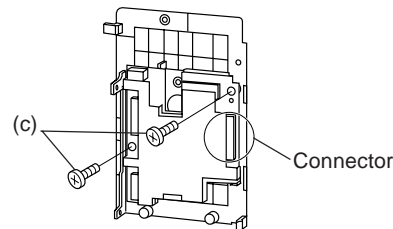
5. Remove the connector of the 6-cell detection switch, and remove two screws ((b)LX-HZ0018TAFN) fixing the battery catcher.



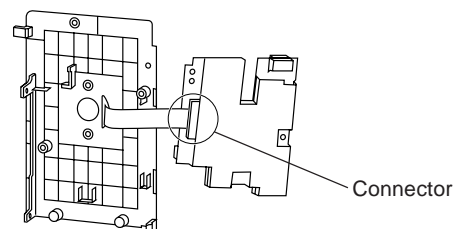
6. Remove two screws ((b)LX-HZ0018TAFN) and pull out the camera side cover from the tilt frame C.



7. Remove the battery catcher from the camera side cover.



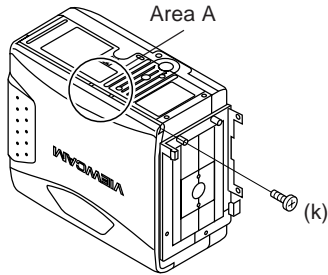
8. Remove one connector of the camera PWB, and remove two screws ((c)LX-HZ0045TAFN) fixing the PWB.



9. After removing the camera PWB from the tilt frame, remove the connector on the rear of the PWB.

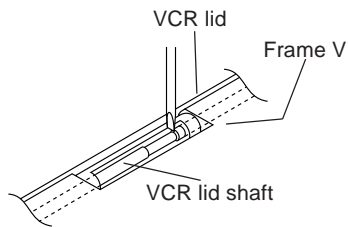
4-2. DISASSEMBLY OF THE VCR MAIN BODY

<1. Removal of the VCR lid shaft>

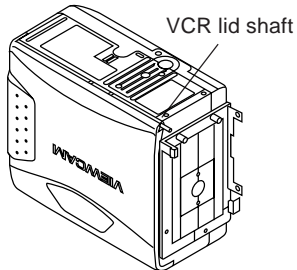


(1) Remove one screw ((k)LX-HZ0063TAFB).

<Detail of area A>

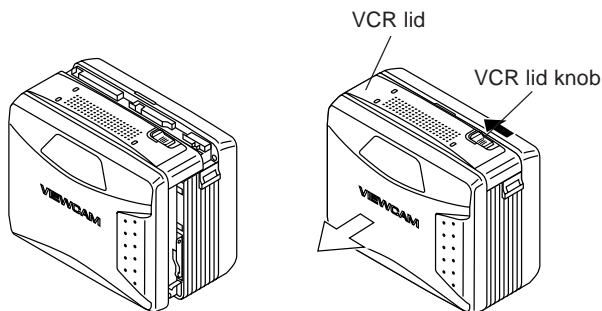


(2) Bring the jig (example: slotted precision screwdriver) into contact with the removal groove of the VCR lid shaft, and slide the screwdriver with care to prevent injuring the VCR lid and frame V.

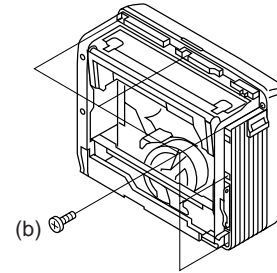


(3) Pull out the VCR lid shaft head which projects beyond the surface of the VCR lid.

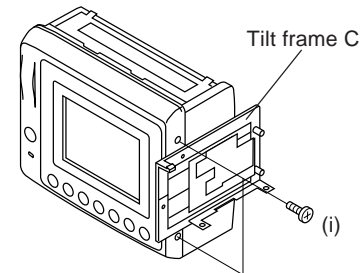
<2. Disassembly of the cabinet L>



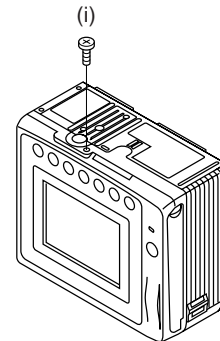
(1) Slide the "VCR lid knob" in the arrow direction, and slide the VCR lid in the arrow direction as far as the cabinet L fastening screw is visible. (Left figure) Since the connector of the microphone is still connected, take care to prevent excessively sliding the VCR lid.



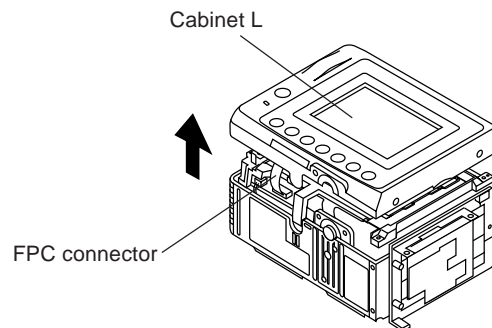
(2) Remove five screws ((b)LX-HZ0018TAFB).



(3) Turn the tilt frame C so that the screwdriver can be easily inserted, and remove two screws ((i)XiPSN20P04000).

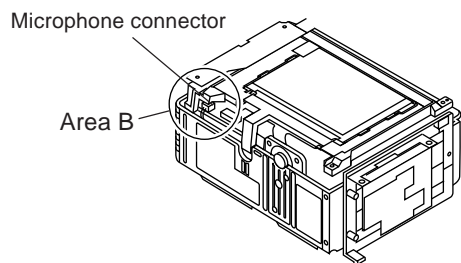


(4) Remove one screw ((i)XiPSN20P04000).



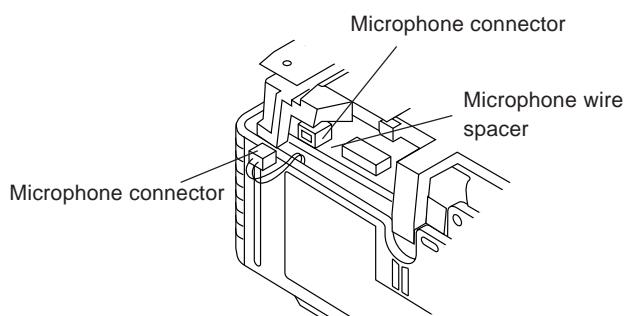
(5) Remove the cabinet L to the midway, and disconnect the FPC connector.

<3. Removal of the VCR lid>



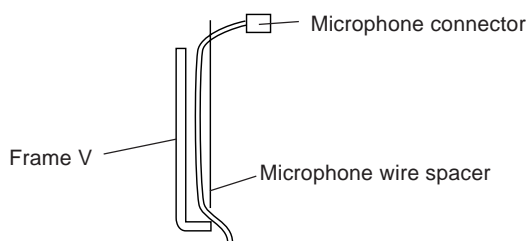
- (1) Disconnect the microphone connector.

<Detail of area B>

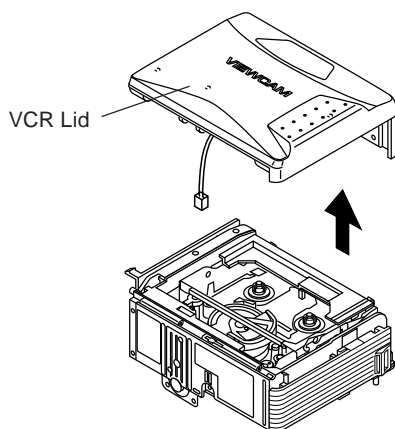


- (2) Remove the connector cable from the hole of the microphone wire spacer.

<Detail of area B>

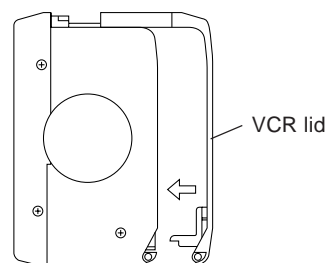


- (3) Remove the microphone wire spacer from the Frame V.



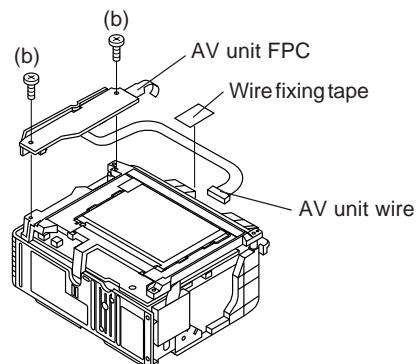
- (4) Pull out the microphone wire cable with care to prevent it from interfering with the mechanical parts, and remove the VCR lid.

Caution for installation of the VCR lid



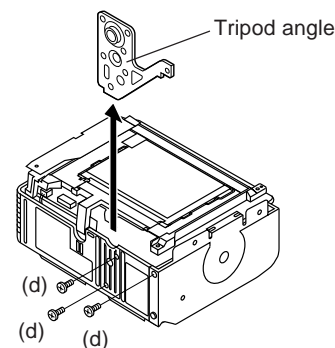
When installing the VCR lid, move the VCR lid in the arrow direction, keeping the VCR lid parallel to the main body as shown above.

<4. Removal of the AV unit and AV unit cover>

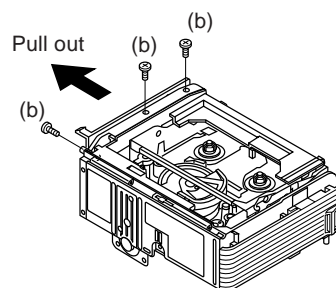


- (1) Peel the wire fixing tape.
- (2) Remove the AV unit wire.
- (3) Remove the AV unit FPC.
- (4) Remove two screws ((b)LX-HZ0018TAFF) fixing the AV unit and LCD holder.

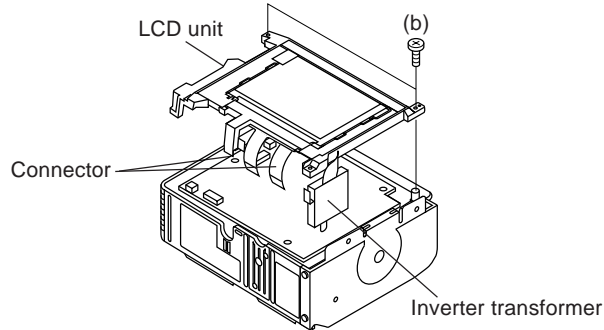
<5. Disassembly of the LCD holder>



- (1) Remove three screws ((d)XiPSF20P04000) pull out the tripod angle.

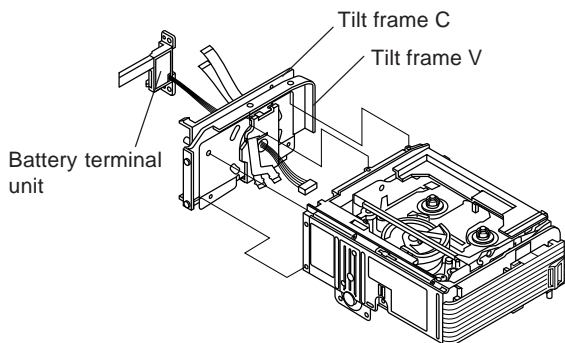


- (2) Remove three screws ((b)LX-HZ0018TAFF) on the tilt frame V.
Move the tilt frame V by a looseness of the tilt FPC.



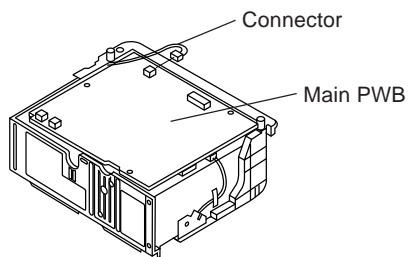
- (3) Remove two screws ((b)LX-HZ0018TAFF) and two connectors, and remove the LCD unit (with inverter) from the main body.

<6. Removal of the tilt unit>

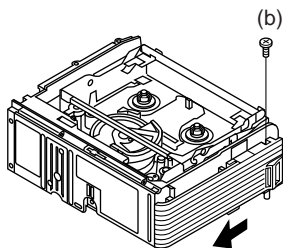


- (1) Disconnect three connectors.
Remove the tilt unit from the cabinet of the main body.

<7. Removal of the speaker cover>

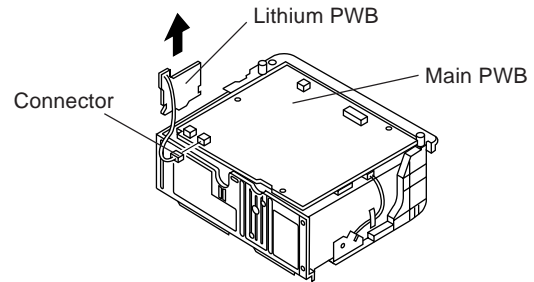


- (1) Remove the connector of the speaker from the Main PWB.



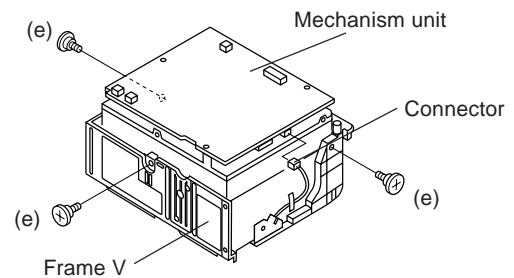
- (2) Remove the screw ((b)LX-HZ0018TAFF) fixing the speaker cover.
(3) Move the speaker holder in the direction of the arrow to remove it.

<8. Removal of the Lithium PWB>



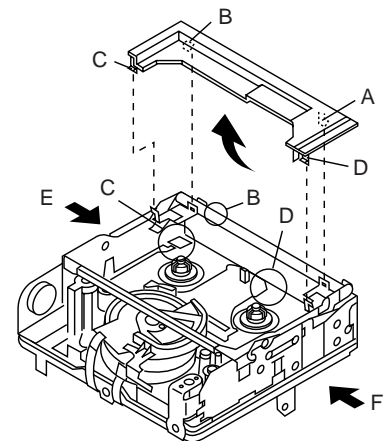
- (1) Remove the connector of the Lithium PWB from the Main PWB.
(2) Move the lithium unit in the direction of the arrow.

<9. Disassembly of the frame V>



- (1) Remove three screws ((e)LX-BZ0191TAFD) and one connector, and remove the frame V from the main body.

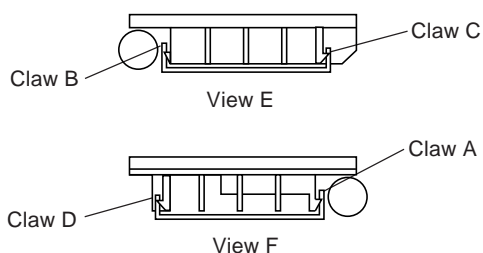
<10. Removal of the cassette compartment lid>



- (1) Using the slotted precision screwdriver, push and turn the two claws (C and D) which fasten the cassette compartment lid, and the cassette compartment lid will be removed from the hook area of the cassette component.
(2) Turning the cassette compartment lid in the arrow direction, lift it, and the claws A and B will be disengaged to remove the cassette compartment lid.

Note:

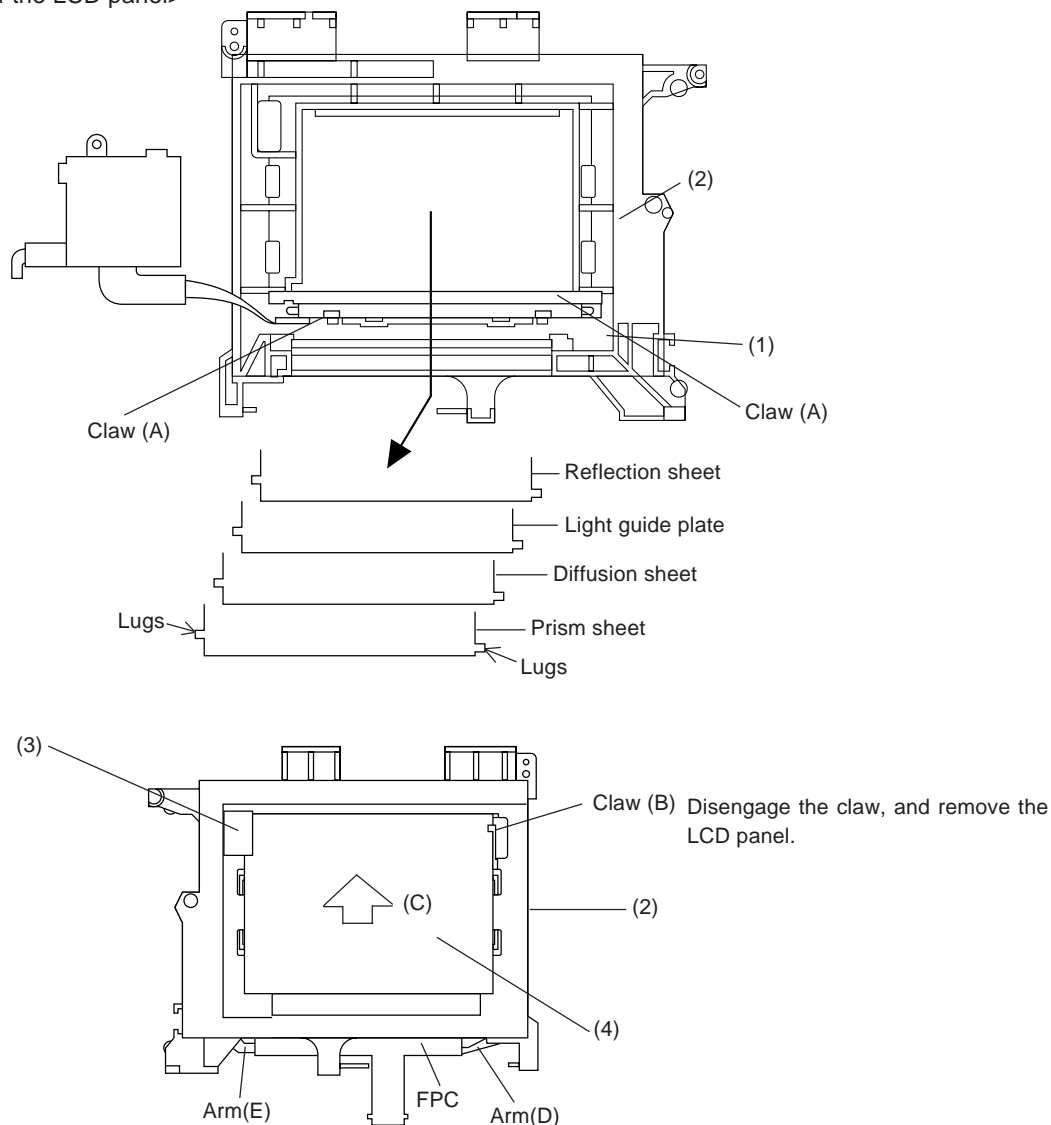
Take care to prevent breaking the claws of the cassette compartment lid.



Note:

When fixing the cassette compartment lid, first engage the claws A and B, and then engage the claws C and D, verify that the four claws (A, B, C and D) of the cassette compartment lid are securely engaged as shown in the view above.

<11. Disassembly of the LCD panel>



1. Disengage two claws (A), and remove the lamp inverter unit (1) from the LCD holder (2).
2. Remove the sheets from the LCD holder (2).
3. Pull the LCD glass retaining (3).
4. Remove the FPC from Arm(D) and (E).
5. Disengage the claw (B), and slide the LCD panel (4) in the (C) direction to remove the LCD holder (2).

Note:

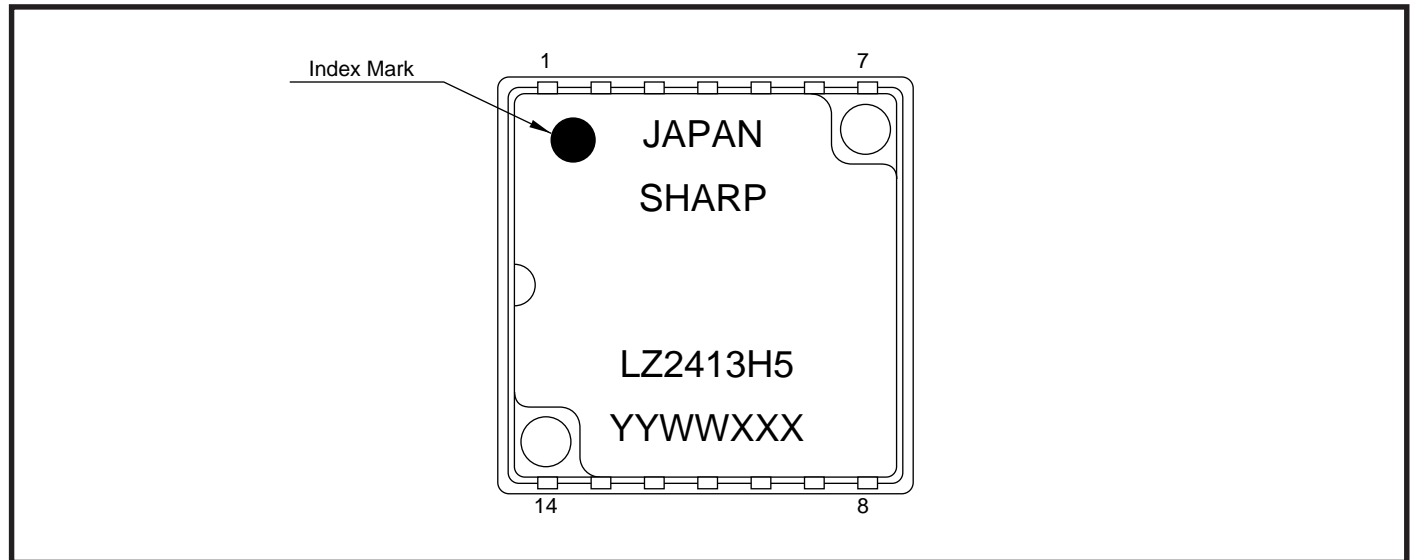
When handling the prism sheet, diffusion sheet, light guide plate, reflection sheet and reflection polarizing sheet do not touch any parts other than lugs and sides.

Put the light guide plate and reflection sheet between reflectors of lamp. Therefore, install them together with the lamp ass'y.

4-3. REPLACEMENT OF CCD SENSOR

4-3-1. BEFORE REPLACEMENT

- 1) The CCD image sensor is more sensitive to electrostatic breakage than C-MOS LSI. Therefore sufficient means to prevent electrostatic damage must be taken when it is replaced.
 - Ground the soldering iron.
 - Ground also the human body, using the wrist strap(through an 1 Mohm resistor).
 - Until the CCD sensor is mounted on the PWB, fit it to the conductive sponge, and short-circuit the foot lead.
- 2) Take utmost care so that the surface glass of CCD sensor and optical filter are not contaminated and damaged. If any contamination is found, for example fingerprint, wipe it off with silicon paper or clean chamois skin.
- 3) When replacing the CCD sensor, use the static electricity prevention grounded soldering-iron, and perform quickly soldering.



4-3-2. REMOVAL OF CCD

- 1) Unsolder the CCD sensor leads from the sensor PWB.
- 2) Take out the sensor PWB.
- 3) Remove the two screws (6), and remove the sensor holder and CCD sensor.

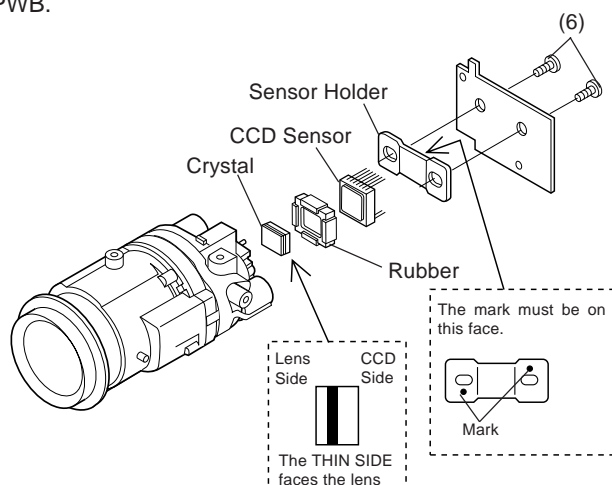
4-3-3. MOUNTING OF CCD

- 1) Place the lens unit upright (since the CCD sensor mount ID faces upward, care must be taken so as not to damage the front lens of unit), put the crystal filter first and then the dust protection rubber into the CCD holder of lens unit. Set the crystal unit with its thin side toward the lens unit.
- 2) Place the CCD sensor so that its No. 1 pin is at the right lower (Positioning hole to be at right), and put the CCD sensor into the CCD holder. For smooth and tight fitting, press the right lower part of back of CCD sensor, and then press the left upper part.

Note: Pay attention to the direction of CCD sensor.

- 3) Place the sensor holder so that its two round markings be visible, and fix the sensor holder with the two screws ((6)LX-HZ0013TAF).
- 4) Mount the sensor PWB so that the CCD sensor leads go through the PWB holes.
- 5) Solder the CCD sensor lead to the sensor PWB.

Note: Take care not to apply excessive heat.



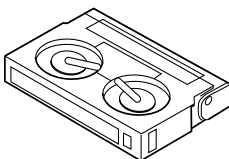
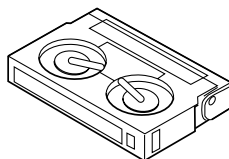


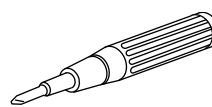
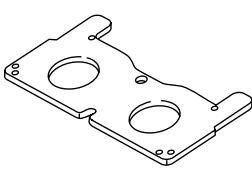
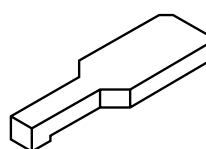
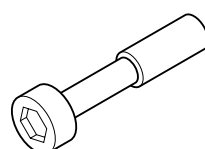
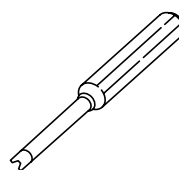
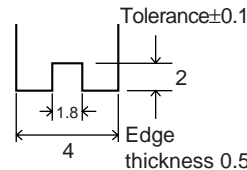
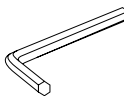
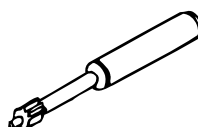
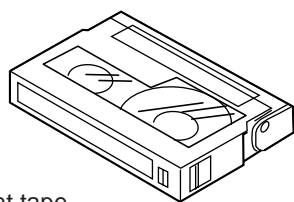
5. MECHANISM ADJUSTMENT

5-1. MECHANISM CHECKING/ADJUSTING JIGS, TOOLS AND PARTS

5-1-1. Mechanism checking/adjusting jigs and tools

Configuration
1. Name
2. Part No.
3. Code
* Model, Uses Remarks

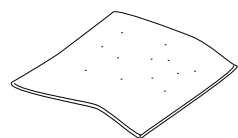
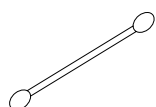
<Note: The entries of list>

 <p>1. Cassette torquemeter for PB 2. JiG8T-012 3. CV * (10 g-cm/25 g-cm)</p>	 <p>1. Cassette torquemeter for VS-REW 2. JiG8T-032 3. CV * (50 g-cm/25 g-cm)</p>	 <p>1. Torque gauge 2. JiGTG0045 3. CN * For measurement of loading brake torque</p>	 <p>1. Torque gauge head 2. JiGTH-MX7U 3. BS * For torque gauge listed left</p>	 <p>1. Torque driver (1.5 kg-cm) 2. JiGTD1500RT0H 3. CB</p>															
 <p>1. Master plane 2. JiGMP-MX7U 3. CG * For adjustment of Tu guide height, Si roller height and checking of reel disk height</p>	 <p>1. Height adjusting jig 2. 9DAGH-E31S 3. BM * For adjustment of Tu guide height and Si roller height</p>	 <p>1. Tu guide height adjusting driver 2. 9EQDRiVER-V712 3. BL</p>	 <p>1. Guide roller height adjusting driver 2. JiGDRiVERHM7U 3. BU * Bit shape (See the figure above.)</p>																
 <p>1. Hex wrench 3. — * For loosening or tightening of Motor stator (1.3mm)</p>	 <p>1. Tension Band and Plate Adjusting Jig 2. JiGDRiVERMX7U2 3. BN</p>	 <p>1. Alignment tape 2. VR2ABOPS 3. BT</p> <table border="1"><thead><tr><th colspan="3">TAPE CONTENTS</th></tr><tr><th>VIDEO IMAGE</th><th colspan="2">AUDIO</th><th>TIME</th></tr></thead><tbody><tr><td>MONOSCOPE</td><td>L-CH</td><td>400Hz</td><td>30MIN</td></tr><tr><td></td><td>R-CH</td><td>1,000Hz</td><td></td></tr></tbody></table>	TAPE CONTENTS			VIDEO IMAGE	AUDIO		TIME	MONOSCOPE	L-CH	400Hz	30MIN		R-CH	1,000Hz		<p><Others> (1) Slide calipers (2) High-precision screw-drivers (Phillips head, slotted head) (3) Radio pliers (with thin jaws) (4) A pair of tweezers</p>	
TAPE CONTENTS																			
VIDEO IMAGE	AUDIO		TIME																
MONOSCOPE	L-CH	400Hz	30MIN																
	R-CH	1,000Hz																	

5-1-2. Parts for periodic inspection and maintenance.

Configuration
1. Name
2. Part No.
3. Code
* Model, Uses Remarks

<Note: The entries of list>

<p>1. Oil COSMOHYDRO HV100 * Cosmo Oil Co., Ltd.</p>	<p>1. Screw locking agent (1401B) * Three Bond</p>	 <p>1. Cleaning paper 2. JiGDUSPER 3. AP * Dusper Σ (Sigma) (Ozu Co., Ltd.)</p>	 <p>1. Superfine swab * Commercially available item</p>
<p>1. Greases Morycoat YM-103/X5-6020 * Dow Coating</p>	<p>1. Cleaning liquid (Industrial-use ethyl alcohol)</p>		

5-2. ITEMS AND TIMINGS OF INSPECTION AND MAINTENANCE

The mechanism of VCR needs the following periodic inspection and maintenance in order that it maintains its high quality. Also, after the machine is repaired, execute the following maintenance and checks regardless of how long it has been used.

5-2-1. Inspection and maintenance list

	Checking/Maintenance point	Usage time (hrs.)					Possible symptom encountered	Remarks
		500	1,000	1,500	2,000	3,000		
Tape travel system	Tape travelling route (Refer to Section)	□	□	□	□	□	<ul style="list-style-type: none"> • Lateral noise • Unclean head • Screen shaking 	Rollers <ul style="list-style-type: none"> • If abnormal rotation or deflection (significant) is found, replace the roller. Other than rollers <ul style="list-style-type: none"> • Clean the tape contacting areas. Be sure to use the specified cleaning agent.
	Drum (Refer to Section)	□	□	□	□	□		
	Video head	□	□○	□	□○	□○	<ul style="list-style-type: none"> • Improper S/N ratio • No color appears. 	
Driving system	Timing belt	—	★	—	★	★	<ul style="list-style-type: none"> • Tape does not run. • Tape slackens. • Screen shakes. 	<ul style="list-style-type: none"> • Replace if failure is found.
	Pinch roller	□	□	□	□○	□		
	Capstan D.D. motor	—	○	—	○	○		
	Relay Pulle shaft Pulle gear shaft	—	△	—	△	△	<ul style="list-style-type: none"> • Abnormal sound 	<ul style="list-style-type: none"> • Apply oil. (Oil : COSMOHYDRO HV100) Note: After oil is applied to the drive gear shaft, slightly wipe it off with swab.
	Drive gear shaft	—	△	—	△	△		
	Loading motor	—	★○	—	★○	★○	<ul style="list-style-type: none"> • Not ejectable • The specific mode cannot be set. 	<ul style="list-style-type: none"> • Replace if failure (abnormal sound) is detected.
Performance check	Abnormal sound	★	★	★	★	★		<ul style="list-style-type: none"> • If conformance to the standard is not ensured, replace part.
	PB/VS-REW take-up torque	—	★	—	★	★		
	PB/VS-REW back tension torque	—	★	—	★	★		
	Tu brake	—	★	—	★	★		
	HC (Head Cleaner)	—	○	—	○	○		

Oil: COSMOHYDRO HV100

Greases: MORYCOAT YM-103/X5-6020

Screw locking agent: THREE BOND 1401B

Cleaning liquid: Industrial-use ethyl alcohol

○ : Replace.

□ : Clean.

△ : Apply oil.

★ : Check.

5-2-2. Notes and cautions

- (1) Any cut washers, once removed for parts replacement or for other reason, must be replaced with new ones.
 - (2) The mechanism of this VCR does not involve any volume adjustment. If the specified range is not satisfied, either cleaning or replacing the parts is required.
 - (3) Oils
 - a) Be sure to use the specified oils (different viscosity may cause troubles).
 - b) For the bearings, be sure to use oil that is free from dust and other foreign substances. (Dust or foreign substance contained in the oil may cause wear or seizure of the bearings.)
 - c) A drop of oil represents the amount of oil which is held on the needle top as shown in the figure 1.
 - (4) The circuit repair must be executed without removing the V frame.
 - (5) For operating the mechanism alone, actuate it with the motor. The terminal-to-terminal voltage must be DC4V or less.
 - (6) When installing the cassette control, press the part A shown in Figure 2.
- *Do not press other parts.
- (7) Take care so that the whole mechanism is not deformed.

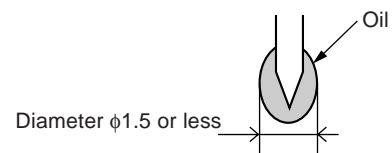


Figure 1

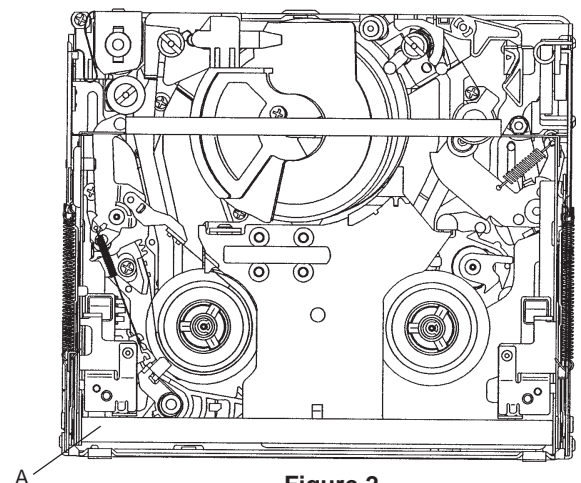


Figure 2

5-3. MECHANISM CHECKS AND ADJUSTMENTS

The description given below relates to the general field services, but does not relate to the adjustment and replacement that require high level equipments, jigs, and technical skills.

In order to maintain the initial characteristics of the machine, it is necessary to execute the maintenance and check and to prevent damage to tapes and other parts. For adjustments which need jigs, be sure to use the jigs.

Notes and cautions

- (1) For mechanism checks and adjustments, be sure to use the AC adapter as the power supply.
- (2) For running the tape, be sure to install the cassette control ass'y in advance. (If the cassette control ass'y is to be removed subsequently after its installation.)

5-3-1. Checking the reel disk height

- (1) Remove the cassette control ass'y.
- (2) Taking due care not to let the master plane touch the tape running areas such as the drum and the guide rollers, position the master plane so that the two guides (A and B in the figure 1) are set in the holes of master plane, then properly set it in the mechanism.
- (3) Using the slide callipers or the like, check that the distance from the upper surface of master plane to the reel support surface of the S/Tu reel disk is within the specified range. (Figure 2)

Note:

When measuring, do not apply excessive force to the reel support surface of reel disk.

- (4) If the measurement is not within the specified range, replace the reel disk ass'y.
- (5) Check the items (2) to (4) above in the following two modes.
 - a) Standby mode
 - b) Playback (recording) mode

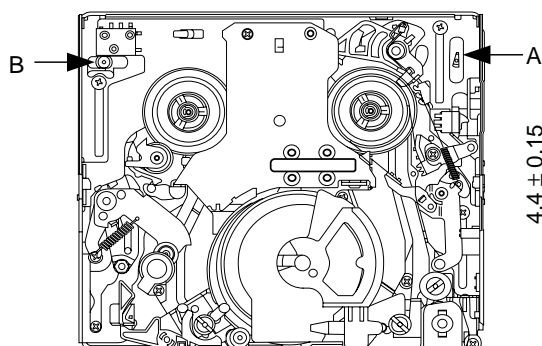


Figure 1

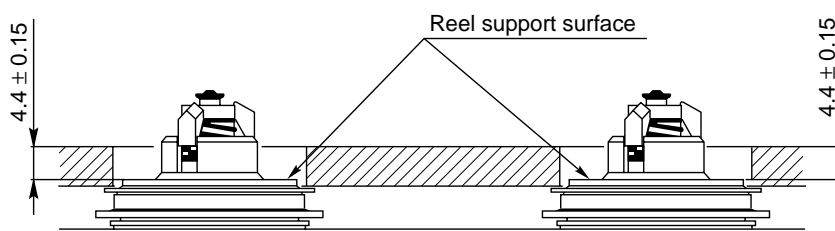


Figure 2

5-3-2. Checking the take-up torque for playback (recording)

- (1) Set the torque cassette (JiG8T-012) in position, and check in the SP-mode recording mode (tape recorded in SP mode) that the torque at the tape taking-up side is within the standard range.

Standard of take-up torque for SP-mode recording (playback)

9 ± 3 g·cm with ripples less than 4 g·cm

(If the torque ripples appear, read the center value of torque between the ripples.)

5-3-3. Checking and adjusting the back tension torque for playback (recording)

(1) Checking

- 1) Set the torque cassette (JiG8T-012) in position, and check in the SP-mode recording mode (tape recorded in SP mode) that the torque at the tape supply side is within the standard range.

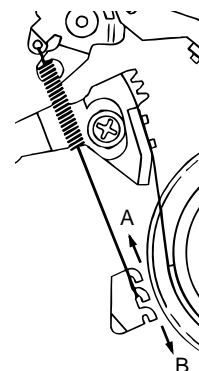
Standard of back tension torque for SP-mode recording (playback):

8 ± 2 g·cm with ripples of less than 2 g·cm

(Torque ripple must be within 8 ± 2 g·cm)

(2) Adjustment

- 1) If the back tension torque is not within the standard range, adjust the tension spring hooking position. If the back tension is too high, hook the spring in the direction A. If the back tension is too low, hook the spring in the direction B.



Note:

1. After back tension torque adjustment be sure to check the tension pole position.

5-3-4. Checking and adjusting the tension pole position

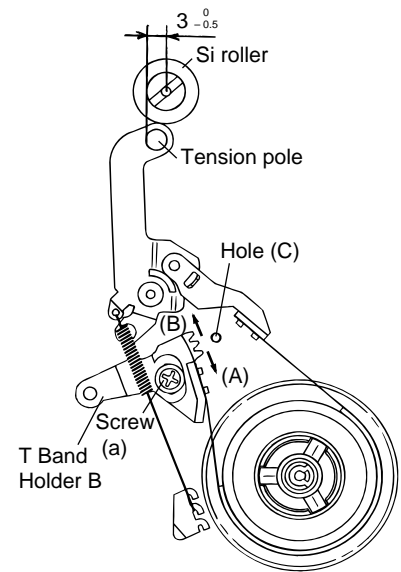
(1) Check

When winding of P6-120 tape is started, check whether the tension pole is in the specified position against Si roller as shown or not.

If it is not in the specified position, remove the cassette and adjust the position in the following procedure.

(2) Adjustment

1. Don't set up any tape, and select the PB mode. (Refer to Item 5-5-1-(4).)
2. Slightly loosen the screw (a) (to such a strength as the T band holder B can be moved).
3. If the tension pole is in the inner position than specified, dislocate the T band holder B in the arrow (A) direction and if it is in the outer position, dislocate it in the arrow (B) position. Then, tighten the screw (a). (For reference, dislocate it 0.4 to 0.8 mm outer from the position specified above.) For the position adjustment, it is convenient to use the position adjustment screwdriver (JiGDRiVERMX7U2). (Set it in the hole (C).)
4. Check the position in the "(1) Check" procedure described above.
5. If it is not in the specified position, repeat the adjusting procedure 1 thru 3.



Note:

- Tightening torque of screw (a) 70 mN·m
- To check the position, be sure to run the tape.
- If the cassette compartment assembly is removed, it makes the work easier. (Refer to Item 5-5-3.)

5-3-5. Checking the take-up torque for rewind playback (VS-REW)

(1) Remove the cassette compartment ass'y and set to the sensor OFF mode.

(2) Set the torque gauge (JiGTG0045) on the S reel disk, and check in the rewind playback (VS-REW) that the torque at the supply side is within the specified range.

Standard of take-up torque in rewind playback (SP mode)

31 ± 5 g·cm with ripples less than 5 g·cm.

(If the torque ripples appear, read the center value of torque between the ripples.)

5-3-6. Checking the back tension torque for rewind playback (VS-REW)

(1) Set the torque cassette (JiG8T-032) in position, and check in the rewind playback (VS-REW) mode that the torque at the tape take-up side is within the specified range.

Standard of back tension torque in rewind playback (SP mode):

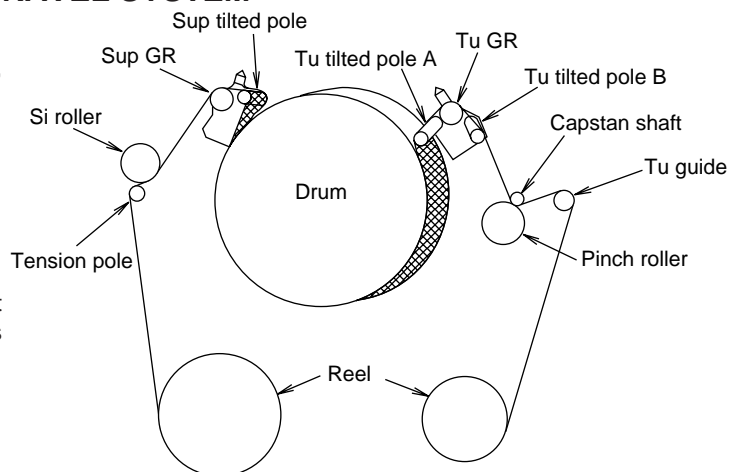
14 ± 5 g·cm with ripples less than 5 g·cm

(If the torque ripples appear, read the center value of torque between the ripples.)

5-4. ADJUSTMENT OF MECHANISM TAPE TRAVEL SYSTEM

5-4-1. Preparation for adjustment

- (1) Clean the tape running areas (guide poles, rollers, drum, Capstan shaft, Pinch roller) (Figure 1)
- (2) Connect the oscilloscope to the following TPs.
RF output TL7410
H-SW-P TL7417
GND TL7413
- (3) Playback the alignment tape (VR2ABOPS).
- (4) Ascertain that each guide is free from remarkable curl.
- (5) Ascertain that the RF waveform of inlet and outlet sides is flat on the oscilloscope (Figure 2, (a)). Unless the waveform is flat, (Figure 2, (b), (c)), make an adjustment as follows.



Tape travel system (Figure 1)

5-4-2. Adjusting the Sup GR and Tu GR

- (1) Turn the Sup and Tu guide rollers to get the flat waveform at the inlet and outlet sides.

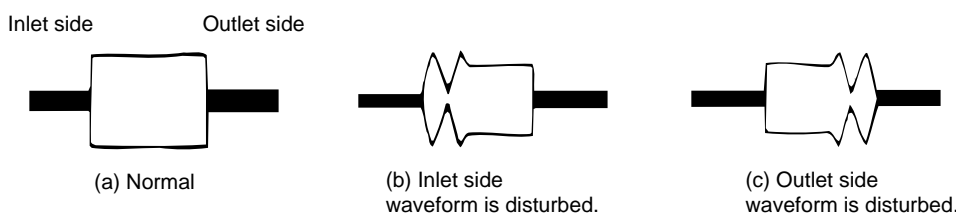


Figure 2

5-4-3. Adjusting the Si roller height

After replacement of Si roller preset and adjust the Si roller height.

- (1) Si roller height presetting
Adjust the height from the upper surface of mechanism chassis to the upper surface of lower flange with the aid of jig. Then lower it by 90° (clockwise).

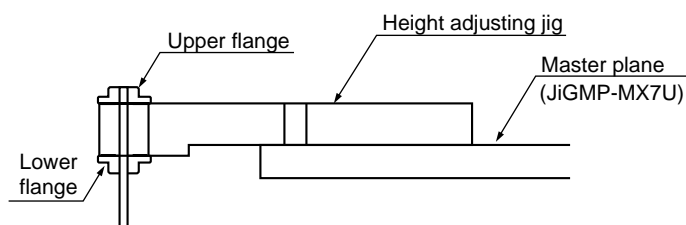


Figure 3

- (2) Adjusting the Si roller
 - 1 Playback the tape to set the V/SR mode.
 - 2 Ascertain that the tape is not folded on the lower flange (B) of Si roller. (Figure 4)
If tape folding is found, turn the upper flange (A) of Si roller with the driver (clockwise) to eliminate the folding.
 - 3 Playback the alignment tape (VR2ABOPS).
 - 4 Adjust the Sup GR and Tu GR by the procedure described in section 4-2 above.
 - 5 After V/S F,R perform playback so as to ascertain that the waveform rises horizontally within 2 seconds.
 - 6 Unless the normal waveform is obtained (Figure 5), turn counterclockwise the upper flange (A) of Si roller, and repeat the step (5) above. Repeat the steps (5) and (6) until the normal waveform is obtained. At this time ascertain that the inlet travel does not change in the normal playback state. If any change is found, adjust the Sup GR, and redo the step (5).

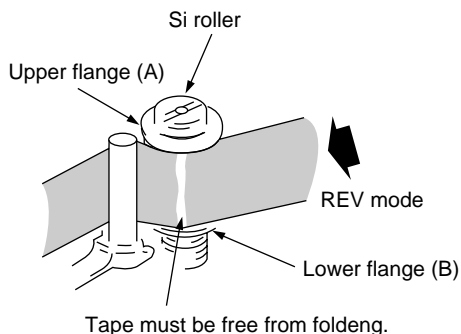


Figure 4

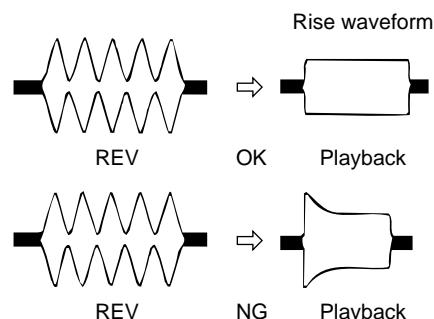


Figure 5

5-4-4. Adjusting the Tu guide

After replacement of Tu guide preset and adjust the height.

(1) Tu guide height presetting (Figure 6)

Adjust the height from the upper surface of mechanism chassis to the upper surface of lower flange with the aid of jig.

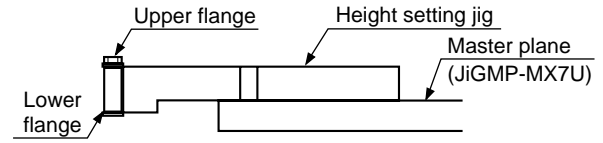


Figure 6

(2) Adjusting the Tu guide (Figure 7)

- 1 Playback the alignment tape (VR2ABOPS).
- 2 Check that the tape runs at the same height near the capstan shaft in case of V/S F and V/S R.
- 3 If the tape running position in case of V/S R is higher than the tape running position in case of V/S F, turn clockwise the Tu guide nat. If the tape running position in case of V/S R is lower than the running position in case of V/S F, turn counterclockwise the Tu guide nat.

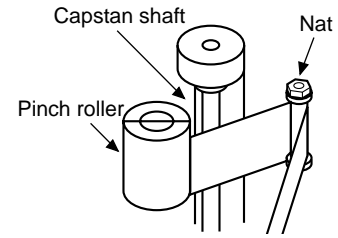


Figure 7

5-4-5. Checking the V/S F and R waveforms (Figure 8)

- (1) Playback alignment tape (VR2ABOPS), and set the V/S R mode. At this time ascertain that the waveform crest pitch is kept constant for more than 5 seconds.
 - (2) Set the V/S F mode. At this time ascertain that the waveform crest pitch is kept constant for more than 5 seconds.
- Unless the constant pitch is obtained, execute the checks of Section 4-2, 3, and 4.

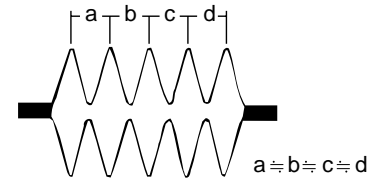


Figure 8

5-4-6. Checking after adjustment

(1) Envelope check

- 1 Playback the alignment tape (VR2ABOPS).
- 2 Ascertain that the envelope maximum to minimum ratio is 65% or more. (Figure 9)
- 3 Ascertain that the waveform does not change remarkably. (Figure 10)

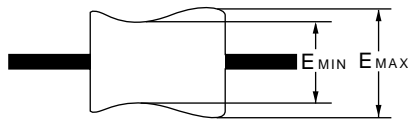


Figure 9 $\frac{E_{MIN}}{E_{MAX}} \geq 65 (\%)$

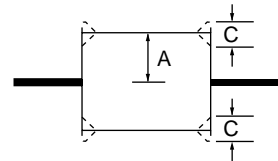


Figure 10 $C \leq 1/8A$

(2) Rise check

- 1 Playback the alignment tape (VR2ABOPS).
- 2 Once eject the cassette, and then load it again.
- 3 Set the playback mode, and ascertain that the RF waveform rises horizontally within 2 seconds. At this time ascertain that there is no tape slackness near the pinch roller.
- 4 After V/S F, R and FF/REW execute playback, and ascertain that the RF waveform rises horizontally within 2 seconds. At this time ascertain that there is no tape slackness near the pinch roller.

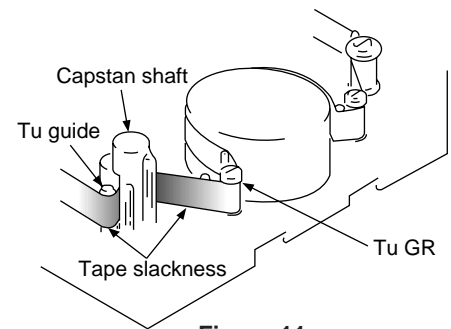


Figure 11

(3) Checking the tape travel

- 1 When the tape is played back, ascertain that tape lift and tape curl of 0.3 mm or more do not occur at the lower flange of Si roller, upper flange of Sup GR, upper flange of Tu GR, and upper/lower flange of Tu guide.
- 2 In case of V/S F and R ascertain that no curl is found at each flange.

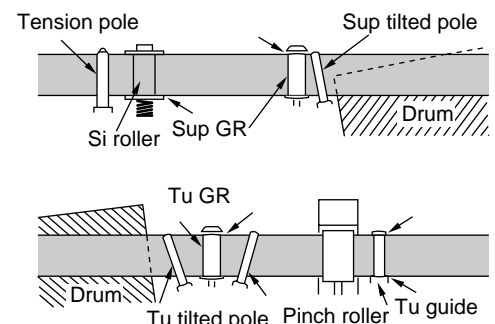


Figure 12

5-4-7. Checking and adjusting the playback switching point

Refer to the description of playback switching point adjustment in section of VCR circuit adjustment.

5-5. MECHANISM ASSEMBLING AND PARTS REPLACEMENT (DISASSEMBLING AND ASSEMBLING)

Below is given an explanation of assembling of mechanism and its parts replacement.
The removal of cabinet and Circuit Board is explained in the relevant service manual.

Notes

- 1 After removal of cut washers be sure to replace them with new ones.
- 2 Do not place the mechanism upside down on the table. Otherwise, the mechanism part may be deformed or damaged, resulting in malfunction.
- 3 When assembling, take care so that screw, washer or other foreign substance do not enter. Otherwise mechanism malfunction may occur.
- 4 Be sure to use the specified cleaning liquid, oil, grease and screw lock as listed below. Otherwise mechanism malfunction may occur.

Oil: Cosmo Oil Co., Ltd.
COSMOHYDRO HV100

Greases: Dow Coating
MORYCOAT YM-103/X5-6020

Screw lock: THREE BOND
1401B

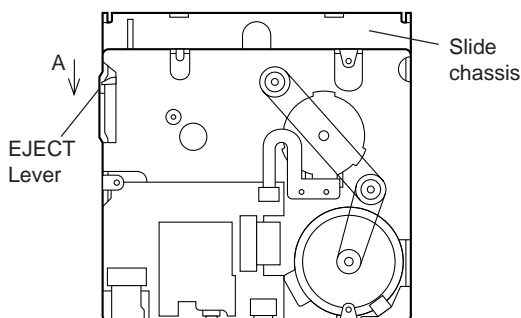
Cleaning liquid: Industrial-use ethyl alcohol

5-5-1. Mechanism modes

To actuate the mechanism, apply DC3 to 4V to the L motor. At this time the L motor connector must have been disconnected in advance.
Below is given an explanation of the mechanism mode necessary for mechanism check, adjustment and replacement.

(1). **EJ** (Eject) mode (See Figure 1)

In this mode, it is mechanically positioned to eject the cassette. It is the position where the EJECT lever is moved the farthest in the direction A in the S/B mode. (In this mode, the cassette compartment assembly can not be locked.)

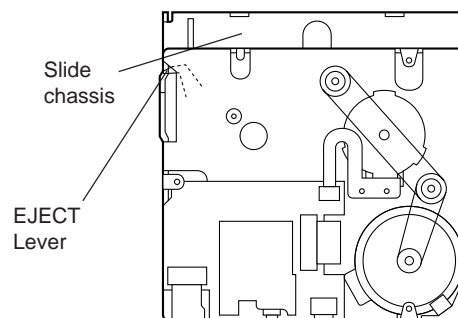


EJ mode

Figure 1

(2). **S/B** (Standby) mode (See Figure 2)

When the cassette is loaded, the mechanism is set to the S/B mode. In this mode the slide chassis is most far from the drum. In this mode the Eject lever is in position shown in Figure 2 (in position where the cassette control ass'y can be locked).

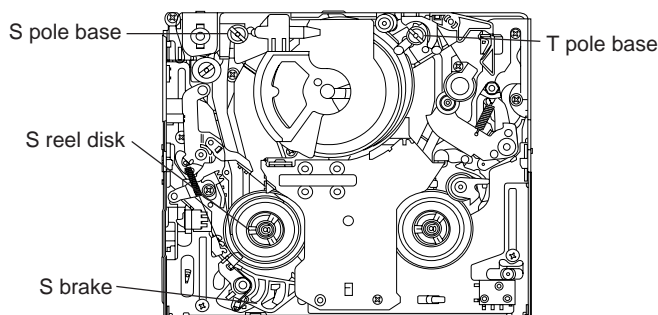


S/B mode

Figure 2

(3). **STOP** mode (See Figure 3)

In the STOP mode the S.T pole base is depressed in the STOP position (or Rec Lock position in CAMERA mode), and the S brake is in contact with the S reel disk.

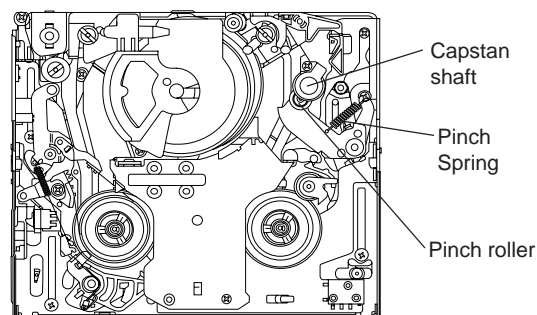


STOP mode

Figure 3

(4). **PB** mode (See Figure 4)

In this mode, it is positioned for the replay, record and so on. It is the mechanical position where the pinch roller is pressed against the capstan shaft to make the pinch-pressing spring the most longest.



PB mode

Figure 4

5-5-2. Cassette control ass'y

<Disassembling>

- (1) Set the unit to the EJECT mode, and let the housing stand upright. Or set the unit to the STANDBY mode, press the lock lever in the arrow direction, and let the housing stand upright. (See Fig. 5: in the direction (a) or (b)) (When pushing in the direction (a), slightly lift the housing by hand to release the lock lever.)
- (2) Remove the four screws (2) and take out the down guide (3).
- (3) Slide the two link support shafts (c) and the two roller shafts (d) to the round openings (g) on their respective slide chassis slits (two at (e) and two at (f)).
- (4) Deflect the roller shafts (d) a little inward to get them out of the round openings (g) on the slide chassis. (Be careful not to deform the inner links.)

<Reassembling>

- (1) Set the unit to the STANDBY mode.
- (2) Deflect the roller shafts (d) a little inward, and fit them into the round openings (g) on the slide chassis. (Be careful not to deform the inner links.)
- (3) Align the flanges of roller shafts (d) with the slide chassis slits (f). While sliding the flanges, fit the support shafts (c) in the slide chassis slits (e), and slide them until they reach the slits.
- (4) Attach the down guide. (While pressing the guide in the direction (i), tighten the screws until the gap (j) between the down guide (3) and the support shafts (c) becomes zero.)

Tightening torque: 70 ± 7 mN·m (0.7 ± 0.07 kg·cm)

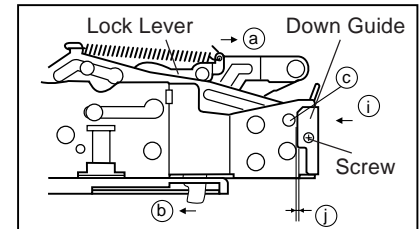


Figure 5. Lock lever section

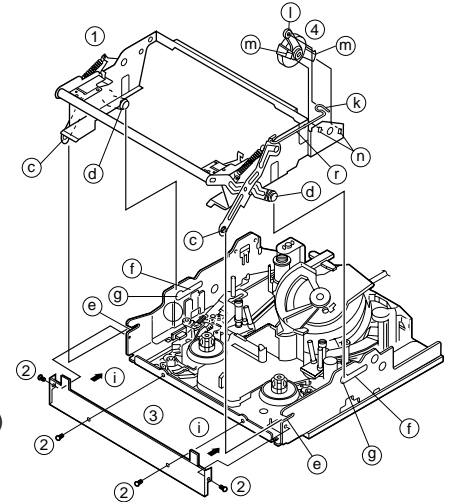
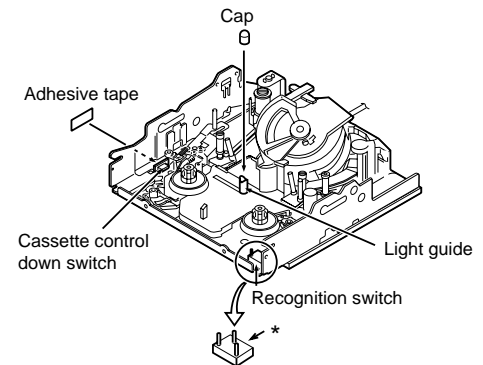


Figure 6



5-5-3. Actuating the mechanism with the cassette control ass'y removed

- (1) Turn on the power supply with the cabinet and camera unit removed, referring to the Service Manual (so as to actuate the mechanism).
- (2) Put the cap on the light guide.
- (3) Press the cassette control down switch through the adhesive tape in the arrow direction so as to turn it on. At this time take care to avoid contact with the cassette. Keep the switch pressed (if the switch is turned off, unloading occurs).

Note: To set the Rec mode, press the pin (marked with the asterisk *) of recognition switch (this operation is not necessary in other modes).

5-5-4. Drum and Drum base

<Removal>

For the drum mounted in this model, there are 2 types. One is the same configuration as the former type, which the rotary transformer rotor ass'y and balancer can be removed. When replacing the upper drum, use the upper drum for service (CDRMU0032GE01) as before. The disassembly/assembly procedure is the same as before.

The other is a type directly bonding the rotary transformer rotor. For this type of drum, the rotary transformer rotor and balancer cannot be removed. Therefore, the disassembly procedure is partially different. When replacing the upper drum, use the dedicated service unit (CDRMU0033GE01) including the following parts. The assembly procedure becomes equal to that of the former drum.

* To replace the upper drum, be sure to put on gloves. Due care is required so that the drum is not damaged.

- Upper drum ass'y (former type)
- Balancer
- Balancer mounting screw
- Rotary transformer rotor ass'y (former type)

- (1) Drum base (Both common type)

Remove the 3 mounting screws as shown in Figure 1, and remove the drum base.

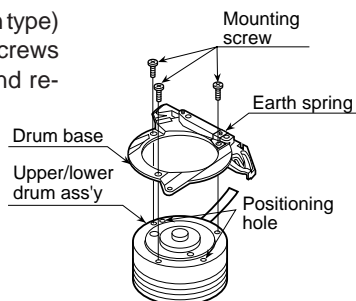


Figure 1

- (2) Drum motor stator (Both common type)

Remove the stator mounting screw with the hexagonal wrench as shown in Figure 2, remove the motor stator.

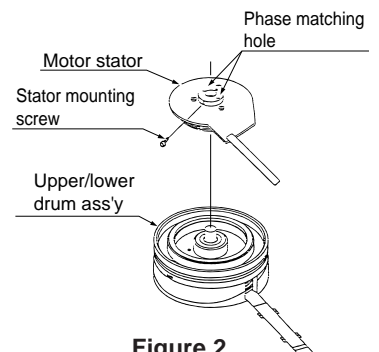


Figure 2

- (3) Upper drum ass'y
(Both common type)
Remove the upper drum ass'y from the lower drum ass'y as shown in Figure 3. At this time take care so as not to lose the gap shim.

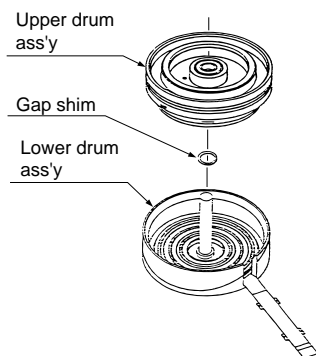


Figure 3

- (5)-a Balancer
(former type)
Remove the balancer mounting screw as shown in Figure 5, and remove the balancer.

- (5)-b. Balancer
(bonded type)
For the bonded type of drum, the balancer cannot be removed.

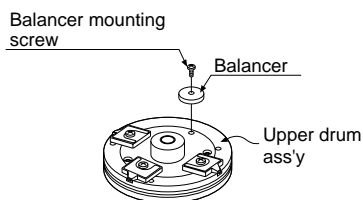


Figure 5

- (4)-a Motor rotor ass'y and rotary transformer rotor ass'y(former type)
Remove the 2 rotor mounting screws as shown in Figure 4-a, and remove the motor rotor and the rotary transformer ass'y.

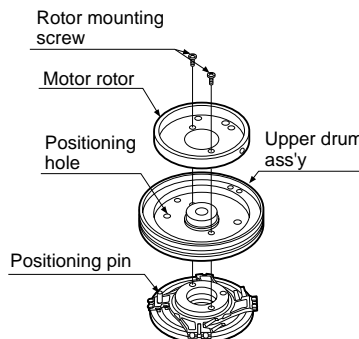


Figure 4-a

- (4)-b Motor rotor ass'y
(bonded type)
Remove two screws fixing the rotor as shown in Figure 4-b, then remove only the motor rotor.

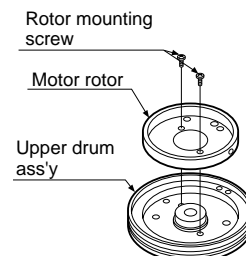


Figure 4-b

- (6) Lower drum ass'y
(Both common type)
Remove the FPC mounting screw from the lower drum ass'y as shown in Figure 6.

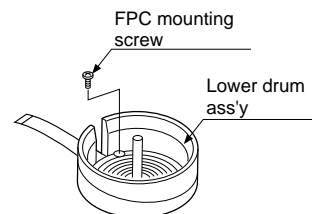


Figure 6

<Installation>

Install the upper drum in the reverse order of removal.

- (1) Balancer

Mount the balancer to the upper drum ass'y with the balancer mounting screw. The screw tightening torque must be 0.1N·m (tightening torque 1kg·cm). (Figure 5)

- (2) Motor rotor, rotary transformer rotor ass'y

Clean the contact surfaces of rotor ass'y holder and upper drum ass'y, and ascertain that there are no contamination and flaws. Next, adjust the phase so that the positioning pin of rotor ass'y is inserted into the positioning hole of upper drum, and tight fit the rotor ass'y to the lower surface of upper drum ass'y (Figure 7).

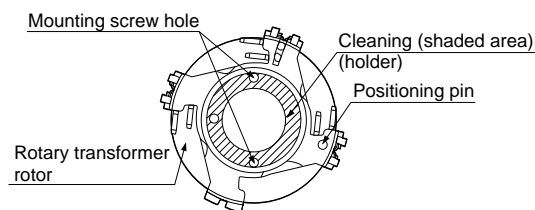


Figure 7

In this state put the motor rotor on the upper surface of upper drum ass'y, and tighten the mounting screw. At this time make sure that the head screw in the three places is visible through the motor rotor hole (Figure 8). The screw tightening torque must be 0.1N·m (1 kg·cm).

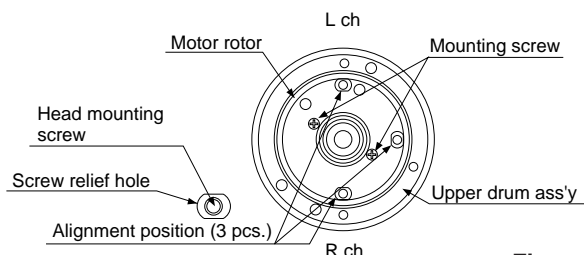
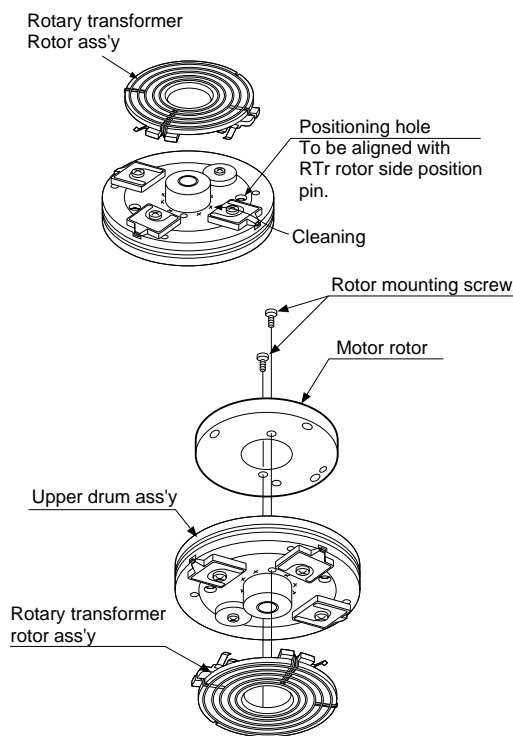


Figure 8



- (3) Lower drum ass'y
Tighten the FPC mounting screw to the lower drum ass'y. The screw tightening torque must be 0.08N·m (tighting torque 0.8kg·cm). (Figure 6)
- (4) Upper drum ass'y
After fitting the gap shim which was removed when the upper drum ass'y was dismantled to the shaft of lower drum ass'y, fit the upper drum ass'y. (Figure 3)
At this time slightly turn the upper drum ass'y by hand to ascertain that RTr does not scrape. If scrape is found, replace the gap shim with the gap shim packaged together with the replacement upper drum ass'y.
- (5) Drum motor stator
Fit the motor stator to the shaft. Then, apply the preliminary pressure 0.07N·m (0.7kg) to the motor stator, tighten the stator mounting screw. The tightening torque must be 0.15N·m (1.5kg·cm).
Install the stator so that the chassis line is nearly parallel with the motor stator straight section when it is installed on the chassis. (Figure 9)
- (6) Drum base
Align the positioning pin, and tighten the screws (3 pcs.).
- (7) Drum ass'y
Install the drum ass'y on the main chassis, and tighten the screws (3 pcs.).
- (8) Tape guide
Align the positioning pin, and tighten the screw (one pc.).

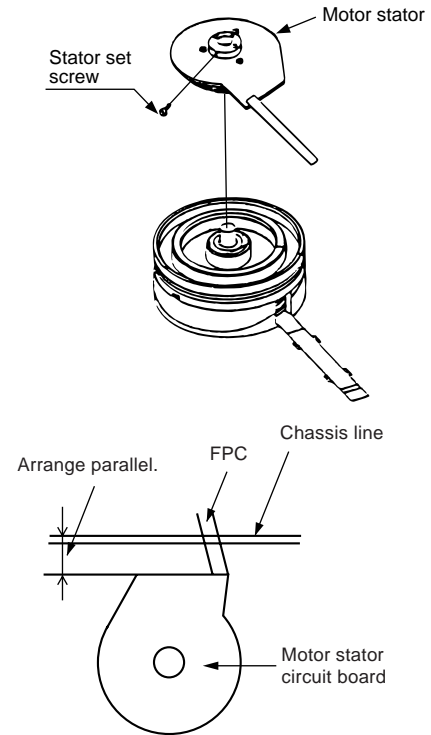
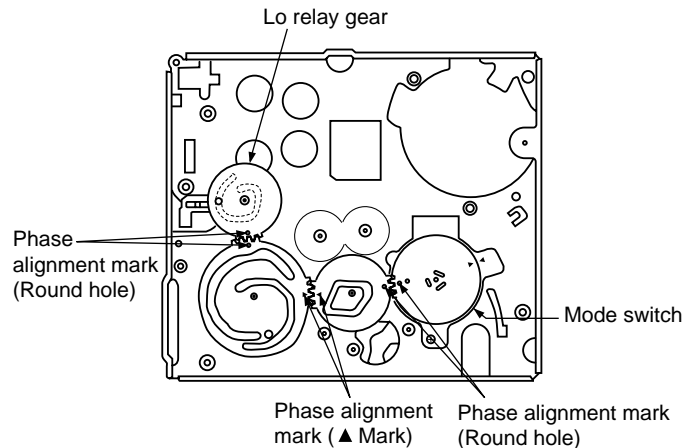


Figure 9

5-5-5. Phase matching

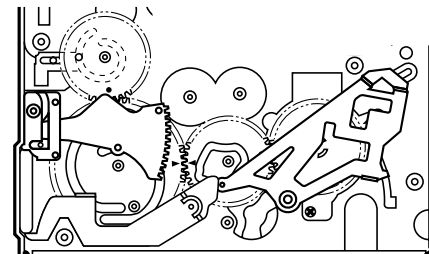
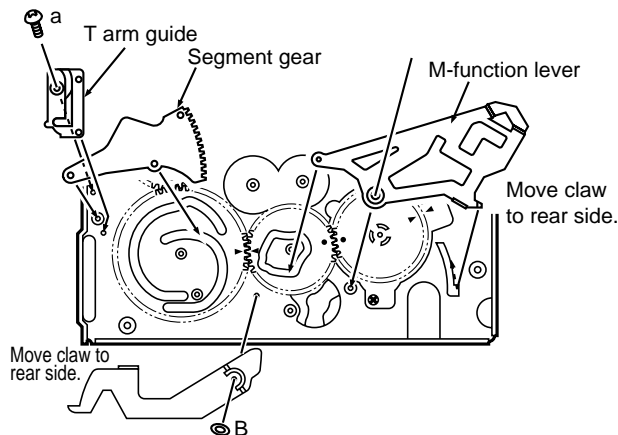
The phase of the following parts must be matched as shown in the figure below.
(Ascertain that the ▲ marks and round holes align.)

- | | |
|-------------------|-----------------|
| (1) Lo relay gear | (2) Main cam |
| (3) Sub-cam | (4) Mode switch |



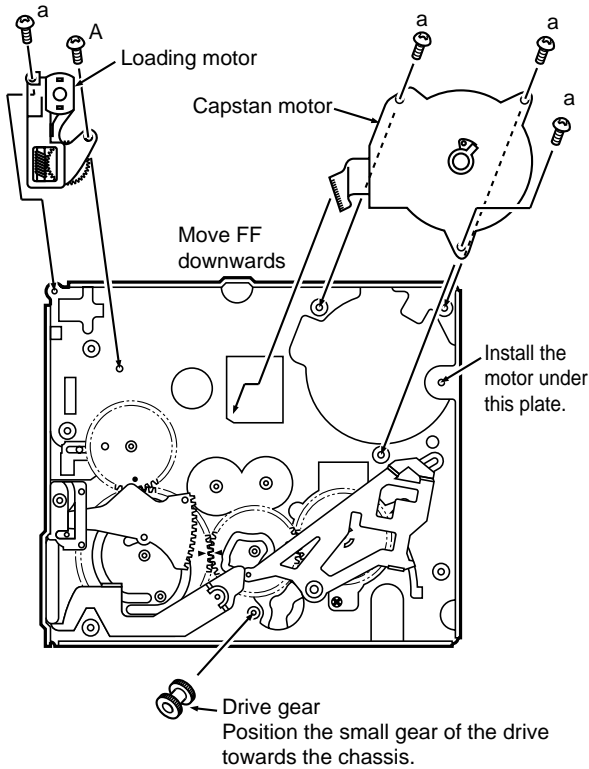
5-6. MECHANISM ASSEMBLING METHOD

- (1) Adjust the phase of each part.
- (2) Install screws and washers.
- (3) Install the segment gear, T arm guide and the M-function lever. Install the eject lever.



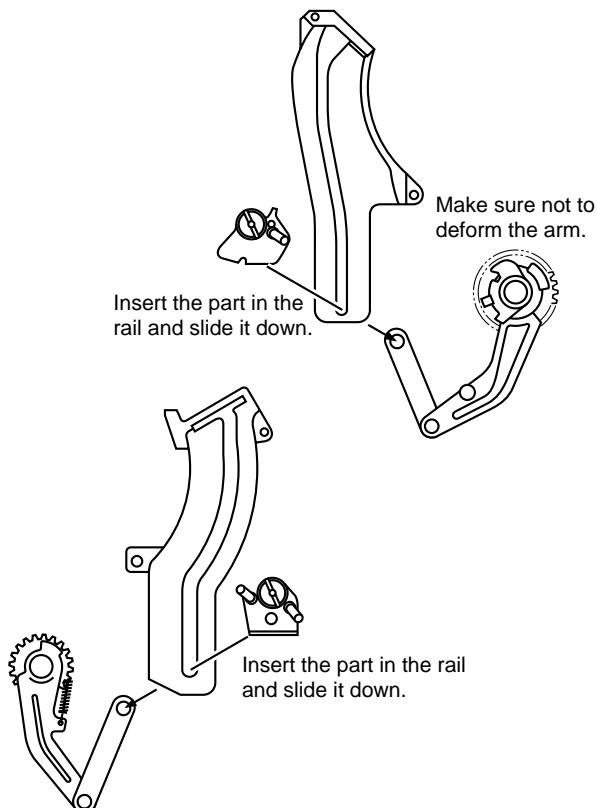
	Item	Tightening torque	Quantity
a	S Tight M1.4 x 3	70mN·m (0.7kgf·cm)	1
B	ø0.8-ø3-t0.2	—	1

- (4) Install the loading block assembly and the capstan motor.
(5) Install the drive gear. At this time, pay attention to the direction of gear. (The small gear must be located in the chassis side.)

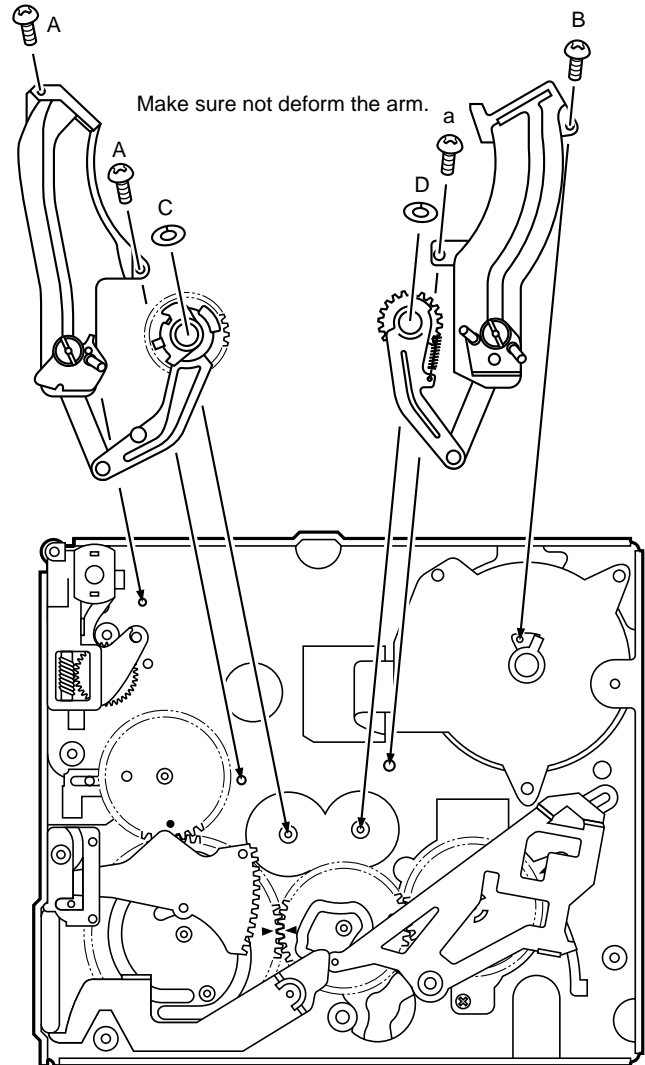


	Item	Tightening torque	Quantity
A	S Tight M1.4 x 2.5	70mN·m	1
a	S Tight M1.4 x 3	70mN·m	4

- (6) Install the guide rail assembly.

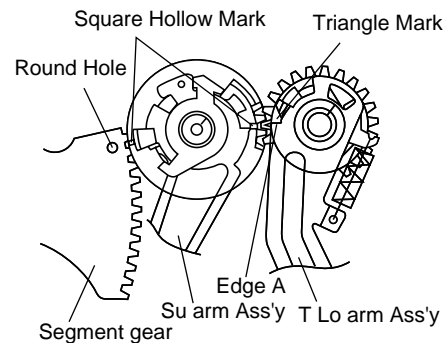


- (7) Install the guide rail assembly taking care to position it correctly.

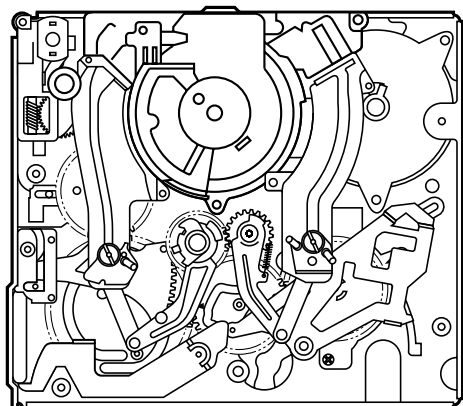
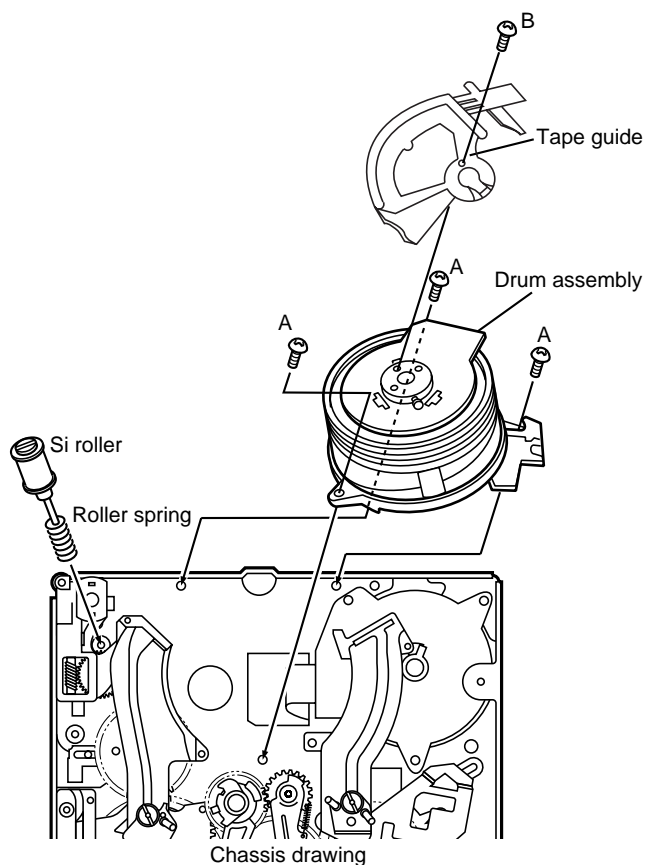


	Item	Tightening torque	Quantity
A	S Tight M1.4 x 2.5	70mN·m	2
B	S Tight M1.4 x 4	40mN·m	1
C	ø0.8-ø3-t0.2	—	1
D	ø2.1-ø5-t0.25	—	1
a	S Tight M1.4 x 3	70mN·m	1

Align the marks on the parts.

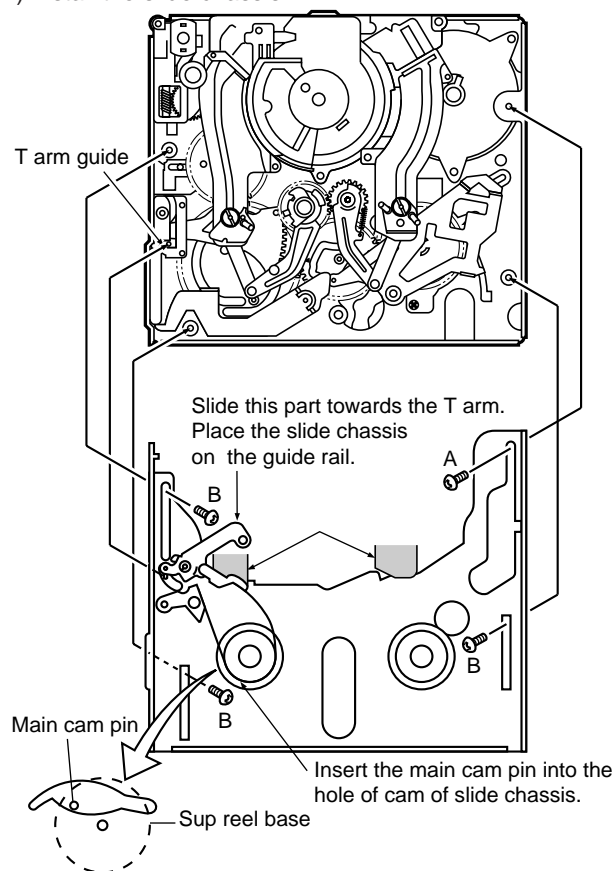


- (8) Install the drum assembly in the chassis.
(9) Install the tape guide in the drum assembly.
(10) Install the Si roller.



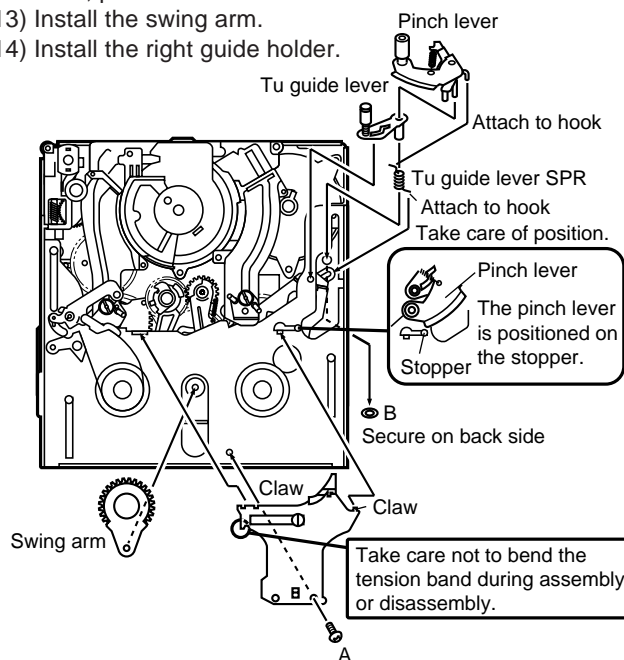
	Item	Tightening torque	Quantity
A	S tight M1.7 x L5.3	100mN·m	3
B	S tight M1.7 x L2.5	60mN·m	1

- (11) Install the slide chassis.



	Item	Tightening torque	Quantity
A	M1.4 x 1.5 ø4	40mN·m	1
B	M1.4 x 1.5 ø3.5	40mN·m	3

- (12) Install in the following order: T guide lever spring, T guide lever, pinch lever.
(13) Install the swing arm.
(14) Install the right guide holder.



	Item	Tightening torque	Quantity
A	S tight M1.4 x 2.5	70mN·m	1
B	CW ø0.8-ø3-t0.2	70mN·m	1

6. ADJUSTMENT OF VCR AND CAMERA

6-1. INITIAL SETTING OF E²PROM IC

6-1-1. E²PROM data alterable ways

- 1) Set the switch of main body to CAM, and use the remote control (RRMCG0033TASA) for adjustment to turn on the adjustment mode.
- 2) VCR adjustment address setting.
V ADJ
0000 "0000" is blinking
After an objective address was established, play key is pushed and set.
In addition, numerical change uses a "REW" or "FF" key.
- 3) VCR adjustment data setting.
V ADJ
0000 ## Value of "##" differs by an address.
After an objective data was established, "PLAY" key is pushed and set.
- 4) When data of other address are changed successively, push "STOP" key, and please repeat operation to 5) from 3).
- 5) When SW of the substance is turned into off, data are written to E²PROM from systematic microcomputer.

6-1-2. IC703 (E²PROM)

When the IC703 has been replaced, make the following settings and adjustments.

1. Remove the backup battery (CR2025).
2. Turn power switch to CAMERA.
3. Setting up the V ADJ mode as follows.
* After press the CONTINUE key, press the VCR ADJ key on service remote control (RRMCG0033TASA).
4. After setting the above data, clear the V ADJ mode and turn off the power by pull out the battery pack or DC cable.
Neglect about 30 seconds after turned of power, because data of address becomes effective after microcomputer is reset.
Now the setting of data is completion.

Data Address	AH30U	A10U	AH30T	A10T	A10K
01	00	00	00	00	00
09	FF	FF	FF	FF	FF
02	01	01	07	07	06
0A	FE	FE	F8	F8	F9
03	00	60	00	60	60
0B	FF	9F	FF	9F	9F
04	00	00	40	40	40
0C	FF	FF	BF	BF	BF

Adjustments to follow

Make the system controller servo, VCR, and LCD adjustments according to their respective instructions.

6-1-3. Camera adjustment

When the IC2 has been replaced, make the camera adjustment according to its instructions.

All the camera adjustment data are written in the E²PROM provided on the lens unit. Therefore, when the lens is replaced, the camera must be adjusted again according to the camera adjusting procedure.

6-2. ADJUSTING THE Y/C, AUDIO AND LCD CIRCUITS ON MODELS WITHOUT A/V IN MODE (A/V IN MODE SET-UP PRODUCE)

- 1) Set the switch of main body to CAM, and use the remote control (RRMCG0033TASA) for adjustment to turn on the adjustment mode.
- 2) Set up the adjustment address (example : EE mode adjustment address 14). Once this address has been set up, the A/V IN mode (test mode) is automatically brought and the images appear on the LCD display.
- 3) Now make the adjustments referring to the instructions in the manual.

6-3. ADJUSTMENT OF VCR SECTION

6-3-1. Before starting the electric circuit adjustment

- Electric circuit adjustment becomes necessary, in most cases, when any of the wear mechanical parts or the video head has been replaced. Before starting the electric circuit adjustment, be sure to check that the mechanical parts work well (i.e., the mechanical parts have all been perfectly adjusted). In case a trouble or troubles are found in the electric circuitry, be sure to pinpoint the cause(s) by using the measuring instruments described below. After locating the trouble spot(s), then proceed to repair, replacement or adjustment. Do not change the positions of the controls when adequate measuring instruments are not available.
- In order to implement a higher-density, smaller machine, most of the electric circuit parts used on the Circuit Boards are of small-sized, surface-mounted type. For replacing part(s) as after-sales service, work with a soldering iron as speedily as possible. The heat resistance of the surface-mounted components is poor, when compared with the larger-sized discrete parts used for television sets and stationary decks, owing to their small sizes. Therefore, exercise due care to avoid long-time exposure of the pins of these parts to the heat of the soldering iron which may possibly damage them. Such care should be exercised especially for chip-layer capacitor replacement. It is advisable to use a temperature-controlled ceramic soldering iron (temperature at the tip: 250°C, contacting time: less than 5 seconds).

- Types of test modes

TEST No.	Title	Contents	Sensor on/off
1	Sensors off	All sensors but the cassette controller switch, dew sensor and battery sensor stay off.	
3	Automatic battery sensor adjustment	Battery sensor's input voltage put in memory.	
4	Battery adjustment error display	Battery sensor's adjustment errors are displayed at the right of the "past errors" area.	All sensors on All but sensors on
5	PASS mode	Track shift mode (1/4 shift)	All sensors on
6	Camera adjustment mode	Camera adjustment mode	[VCR interrupted]
7	VCR adjustment mode	VCR adjustment mode	
8	Automatic switching point adjustment (STOP ADJ)	Play standard tape and call this mode. Switching point is automatically adjusted.	

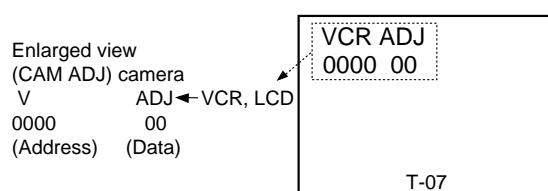
- ① When the battery adjustment mode is selected from the camera adjustment mode with a cassette with the erase protection tab, the VCR is automatically put in the REC mode.

- Below discussed are these seven test modes.

- ① [TEST No. 1] Sensors off mode
All the sensors, except for the cassette controller switch, dew sensor and battery sensor, stay off. This enables to bring the VCR in the loading mode without tape. The VCR/camera performance can now be checked with no tape inside.
- ② [TEST No. 3] Automatic battery alarm adjustment
Used to automatically adjust the voltage level which makes the "battery" appear on the LCD display.
- ③ [TEST No. 4] Battery alarm check/error display
 - The difference between the preset battery alarm voltage and the current supply voltage is displayed as follows.
 - A past error is displayed at the right of the current battery alarm error.
- ④ [TEST No. 5] PASS mode
Used to adjust the tape travelling condition. The tracking is shifted by 1/4 from the center to make the tape running-related RF envelope fluctuations easier to observe.
- ⑤ [TEST No. 6] Camera adjustment mode
Used to adjust the camera section. (For details, see Servicing the Camera Section.)
- ⑥ [TEST No. 7] VCR adjustment mode
Used to adjust the VCR section. (For details, see Servicing the VCR Section.)
- ⑦ [TEST No. 8] Automatic switching point adjustment
Used to automatically adjust the playback switching point. (For details, see Automatic Adjustment of the Playback Switching Point.)

6-3-2-2. Setting up the VCR section adjustment mode (camera section adjustment)

- Select adjustment items by using addresses. Rewrite the adjustment data to change the settings.
- Below shown the adjustment procedures and on-screen display.



	Procedural steps	Display (: flashing)
①	Turn up or down the flashing hexadecimal number with the FF or REW key to select the address of a desired adjustment item. (Initial address: 00H) Note: The addresses change as follows. 01FE — 01FF — 0000 — 0001 — 0002	V ADJ
②	Press the PB key to read the data of the selected address.	V ADJ 002C A3
③	Turn up or down the data setting with the FF or REW key. The data display starts flashing.	V ADJ 002C
④	Press the PB key again to write the data setting into the selected address.	V ADJ 002C 72
⑤	Press the STOP key in the above step ② or ④, and the screen returns back to the step ①.	V ADJ

When the FF or REW key is held down for 0.3 second or longer, the address selection is repeated in cycles of 100 msec. The data setting changes by ± 4 by holding the key down for 2 seconds or longer.

6-3-2-3. Battery shut-off voltage adjusting method

- 1) Supply power to the main unit, using the variable-voltage DC power supply (range of 2.5V to 5.0V).
- 2) Set the CAM/OFF/VCR SW to CAM to switch to the camera mode.
- 3) Load a recordable tape and set the main unit to CAM REC. PAUSE.
- 4) Set the main unit to TEST mode No. 3, and start recording.
- 5) Measure voltage between TL2911(+) and TL2914(GND), and adjust the supply voltage to 3.1V.
- 6) The adjustment is complete if "BATTERY" is displayed on the monitor screen for a second when the PLAY key of operation unit is pressed.
- 7) The adjustment is regarded as proper if the auto shut-off is actuated after the warning is displayed when the TEST mode is cancelled.

* In case of automatic adjustment of shut-off voltage, adjustment is impossible if voltage is above $3.1V \pm 0.2V$.
If the adjustment is made at 2.9V or below, the low-voltage operation may become unstable.

•Type of test modes

<Procedures>

To adjust the camera section of this machine, the remote control for servicing (RRMCG0033TASA) is used.

Press the "CONTINUE" key → "TEST SEL", this will show [T-01] on the LCD OSD, (01:flashing), and select the below TEST No. with "FF" or :REW" key and set with "PLAY" key.

Same procedures of adjustment from now on.

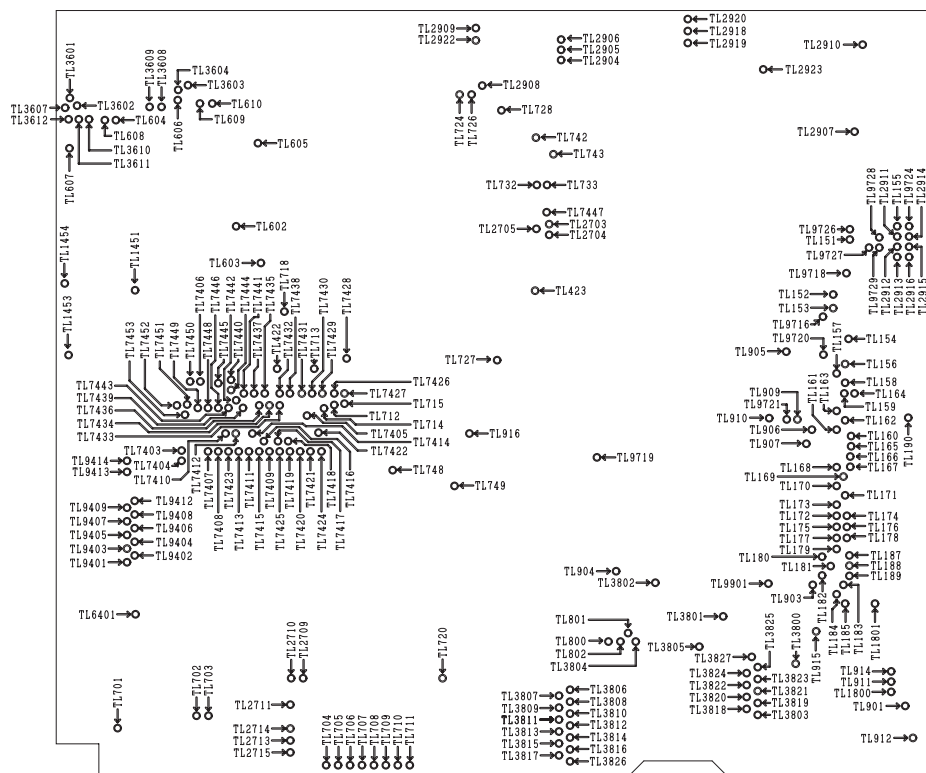
Use the SW2 thru SW9 switches on the adjustment tool to select the following test modes.

TEST No.	Title	Contents	Sensor on/off
1	Sensors off	All sensors but the cassette controller switch, dew sensor and battery sensor stay off.	
2	Mechanism adjustment mode	① Automatic SP/LP detection prohibited ② Different-mode detection prohibited ③ ATF sampling limited to center	All sensors on
3	Automatic battery sensor adjustment	Battery sensor's input voltage put in memory.	
4	Error display Battery adjustment error display	Past errors appear on the counter display of the viewfinder. Battery sensor's adjustment errors are displayed at the right of the "past errors" area.	All sensors on All but sensors on
5	PASS mode	Track shift mode (1/4 shift)	All sensors on
6	Camera adjustment mode	Camera adjustment mode	[VCR interrupted]
7	VCR adjustment mode	VCR adjustment mode	
8	Automatic switching point adjustment (STOP ADJ)	Play standard tape and call this mode. Switching point is automatically adjusted.	

- ① When the battery adjustment mode is selected from the camera adjustment mode with a cassette with the erase protection tab, the VCR is automatically put in the REC mode.

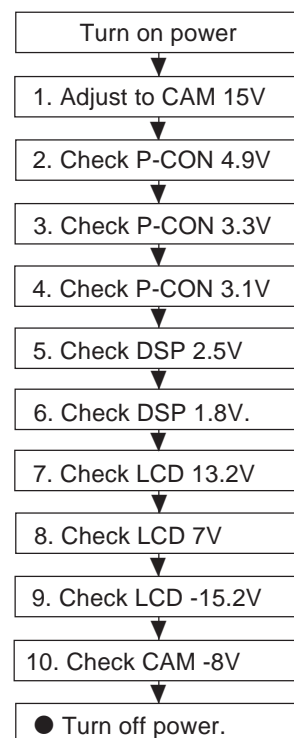
6-3-3. Adjusting the VCR circuit

- Test Points on the Video Circuit Board



6-3-3-1. Adjusting the power circuit

a) POWER CIRCUIT ADJUSTMENT PROCEDURE



POWER CIRCUIT ADJUSTMENT METHOD

- Input 7V from DC Jack, and set the power switch to the camera side.
- ✱ Don't fail to fix the back light unit before adjusting them.

1. Adjustment to CAM 15V

Make an adjustment so that the digital voltmeter indicates $15\text{V} \pm 0.05\text{V}$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL905
Adjustment address	32h
Standard	15V ± 0.05V

2. Checking of P-CON 4.9V

Ascertain that the digital voltmeter indicates $4.9\text{V} \pm 0.1\text{V}$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL901
Adjustment address	
Standard	$4.9V \pm 0.1V$

3. Checking of P-CON 3.3V

Ascertain that the digital voltmeter indicates $3.3\text{V} \pm 0.1\text{V}$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL903
Adjustment address	
Standard	3.3V ± 0.1V

4. Checking of P-CON 3.1V

Ascertain that the digital voltmeter indicates $3.1\text{V} \pm 0.1\text{V}$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL9718
Adjustment address	
Standard	3.1V ± 0.1V

5. Checking of DSP 2.5V

Ascertain that the digital voltmeter indicates $2.5\text{V} \pm 0.1\text{V}$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL916
Adjustment address	
Standard	2.5V ± 0.1V

6. Checking of DSP 1.8V

Ascertain that the digital voltmeter indicates $1.8\text{V} \pm 0.1\text{V}$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL910
Adjustment address	
Standard	1.8V ± 0.1V

7. Checking of LCD 13.2V

Ascertain that the digital voltmeter indicates $13.2\text{V} \pm 0.2\text{V}$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL907
Adjustment address	
Standard	13.2V ± 0.2V

8. Checking of LCD 7V

Ascertain that the digital voltmeter indicates $7V + 0.4/-0.5V$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL904
Adjustment address	
Standard	7V + 0.4/-0.5V

9. Checking of LCD -15.2V

Ascertain that the digital voltmeter indicates $-15.2\text{V} \pm 1\text{V}$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL906
Adjustment address	
Standard	-15.2V ± 1V

10. Checking of CAM -8V

Ascertain that the digital voltmeter indicates $-8V \pm 0.5V$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL909
Adjustment address	
Standard	-8V \pm 0.5V

6-3-4. Adjustment of system controller and servo circuit

6-3-4-1. Adjustment of playback switching point

b) CHARGING CIRCUIT ADJUSTMENT PROCEDURE

- 1) Play back the alignment tape (JiGWR5-5NSP)
- 2) Press the "CONTINUOUS PUSH" and "TEST MODE SELECTION" of adjustment remote controller to set the test mode.
(At this time the numeral of "TEST01" blinks.)
- 3) Using the "FF" and "REW" keys, select "TEST08", and press the playback key to set the SW-P adjustment mode.
- 4) After a while the adjustment is completed, and operation stops automatically.
In case of adjustment failure the tape is ejected automatically.

Only in the case when the satisfactory result was not obtained by the adjusting method described above, perform the following adjustment.

- 1) Connect each signal to the oscilloscope.
1ch: SEP Y OUT TL1453
2ch: H-SW-P TL7417
GND: GND TL1454
- 2) Play back the alignment tape (JiGWR5-5NSP)
- 3) Press the "CONTINUOUS PUSH" and "VCR ADJUSTMENT" of adjustment remote controller to set the VCR adjustment mode.
- 4) Select the address 30h, set the sync slope of oscilloscope to (-), adjust the data with "REW" and "FF" so that the interval between the trigger point and the V sync signal is set to 6H, and fix the data with the "PLAY" button. (See Figure 6.1.1.)
- 5) Then, set the sync slope to (+), and ascertain that the interval between the trigger point and the V sync signal has been set to 6H. (See Figure 6.1.2.)
- 6) Keep the STOP key pressed for about 3 seconds to exit from the adjustment mode.

Measuring instrument	Oscilloscope
Mode	Playback
Adjustment address	30h
Tape	Alignment tape (JiGWR5-5NSP)

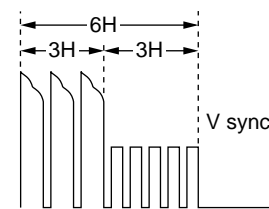


Figure 6.1.1

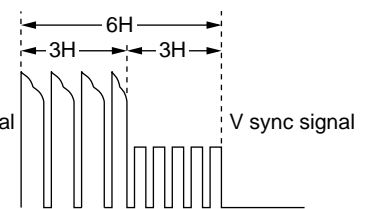


Figure 6.1.2

6-3-5. Y/C circuit adjustment method

1. Y recording current adjustment

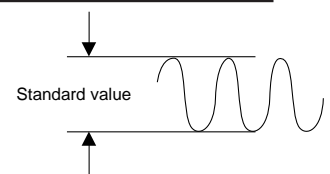
· Hi-8model (VL-AH30U Series)

	Mode	Address	Measuring point	Adjustment standard	Measuring instrument
REC Y current adjustment (Hi-8)	VCR	3F	TL9413(Sig)	ME 130±5mVP-P	Oscilloscope
		40		MP 95±5mVP-P	
REC Y current adjustment (Nor 8)	STOP	41	TL9414(Gnd)	ME 125±5mVP-P	
		42		MP 120±5mVP-P	

· Nor8model (VL-A10U Series)

	Mode	Address	Measuring point	Adjustment standard	Measuring instrument
REC Y current adjustment (Nor 8)	VCR	42	TL9413(Sig)	MP 120±5mVP-P	Oscilloscope
	STOP		TL9414(Gnd)		

- (1) Enter the VCR STOP mode.
- (2) Select the above applicable address with the adjustment remote control.
- (3) Measurement signal is output to TL9413.
- (4) Adjust the amplitude so as to get the adjustment standard value at TL9413(Sig) and TL9414(Gnd).



2. C recording current adjustment

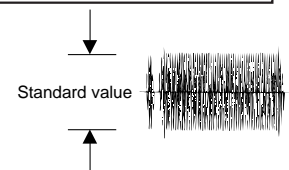
· Hi-8model (VL-AH30U Series)

	Mode	Address	Measuring point	Adjustment standard	Measuring instrument
REC C current adjustment (Hi-8)	VCR	43	TL9413 (Sig)	ME 115±5mVP-P	Oscilloscope
		44		MP 105±5mVP-P	
REC C current adjustment (Nor 8)	STOP	45	TL9414 (Gnd)	ME 135±5mVP-P	
		46		MP 120±5mVP-P	

· Nor8model (VL-A10U Series)

	Mode	Address	Measuring point	Adjustment standard	Measuring instrument
REC Y current adjustment (Nor 8)	VCR	42	TL9413 (Sig)	MP 120±5mVP-P	Oscilloscope
	STOP		TL9414 (Gnd)		

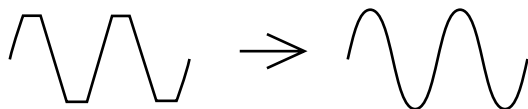
- (1) Enter the VCR STOP mode.
- (2) Select the above applicable address with the adjustment remote control.
- (3) Measurement signal is output to TL9413.
- (4) Adjust the amplitude so as to get the adjustment standard value at TL9413(Sig) and TL9414(Gnd).



6-3-6. Adjustment of audio circuit

1. Adjustment of filter f0

Measuring instrument	Oscilloscope
Mode	PB
Input signal (tape)	JiGWR5-5NSP
Measuring terminal	TL605/AUDIO.OUT
Adjustment address	33
Set value	Clear the waveform



Audio Check

Checking of self-recording/playback

Measuring instrument	Valve Voltmeter (oscilloscope)
Mode	REC → PB
Input signal (tape)	400 Hz, -8 dBs (872 mVp-p)
Measuring terminal	Audio IN/OUT
Adjustment address	—
Set value	-8 dBs ± 4 dBs (580 to 1370 mVp-p)

- 1) Set the alignment tape (JiGWR5-5NSP).
- 2) Using the adjustment remote controller (RRMCG0033TASA), set the VCR adjustment mode, and set the address "33" with the operation switch (FF/REWIND key).
- 3) Play back the standard tape.
- 4) Using the operation switch (FF/REWIND key), make an adjustment so that the most clear playback waveform is obtained on TL605.
- 5) Press the operation switch (PLAYBACK key) to write the data.
- 6) Press the operation switch (STOP key) to exit from the address "33".
(The address "33" blinks.)

- 1) Input the audio signal (400Hz, -8dBs) into the Audio line IN/OUT terminal, and record.
- 2) Connect the valve voltmeter (oscilloscope) to the Audio line IN/OUT terminal.
- 3) Play back the record, and ascertain that the output waveform level is -8 dBs ± 4 dBs (580 to 1370 mVp-p on the oscilloscope).
- 4) If there is any deviation from the specified value, perform adjustment again as stated in items 1) above, and check again the self-recording/playback level.

6-3-7. Adjustment of LCD display circuit

Adjustment procedures and connections are the same as with the VCR section. (Refer to item 6-3-3)

1. Inverter input Voltage Setting

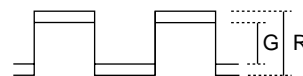
VCR ADJ	
Address	Data
50	8F
51	8A
52	6F

2. Dac full-Scalle adjustment

Measuring point	TL1801 (G-OUT)
Address	039
Mode	VCR
Adjusting method	1) Set the data of address 082 changed to 80, address 0A2 changed to 00, address 0A5 changed to 80. 2) Connect TL3804 to P-CON 3.1V. 3) Connect the Digital voltmeter to TL801 and adjust the DC volt. 4) Set the data of address 082 changed to 40, address 0A2 28. (Restore)
Adjustment standard	0.78V ± 10mV
Remarks	_____

3. R-W/B adjustment

Measuring point	TL3814 (G-OUT) TL3813 (R-OUT)
Address	090
Mode	VCR
Adjusting method	1) Set the data of address 082 at the address 80. 2) TL3814 (G-OUT): Oscilloscope CH1 TL3813 (R-OUT): Oscilloscope CH2 3) Adjust P-P of TL3813 becomes bigger 0.15V than TL3814. 4) Set the data of address 082 at the address 40. (Restore)
Adjustment standard	±0.1Vp-p
Remarks	_____



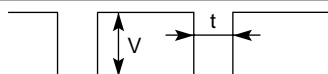
4. B-W/B adjustment

Measuring point	TL3814 (G-OUT) TL3815(B-OUT)
Address	092
Mode	VCR
Adjusting method	1) Set the data of address 082 at the address 80. 2) TL3814 (G-OUT): Oscilloscope CH1 TL3815 (B-OUT): Oscilloscope CH2 3) Adjust P-P of TL3815 become bigger 0.1V than TL3814. 4) Set the data of address 082 at the address 40. (Restore)
Adjustment standard	±0.1Vp-p
Remarks	_____

5. VCO adjustment

Measuring point	TL3802
Address	03E
Mode	VCR
Adjusting method	1) Connect TL3803 to GND. 2) Connect the frequency counter to TL3802, and adjust the frequency.
Adjustment standard	15.734kHz \pm 100Hz
Remarks	_____

6. H-position adjustment

Measuring point	TL3802
Address	03B
Mode	VCR
Adjusting method	1) Connect the oscilloscope to TL3802, and adjust the pulse width. 
Adjustment standard	2.8μsec \pm 0.15μsec
Remarks	_____

7. COMMON PULSE adjustment

Measuring point	TL1801
Address	037
Mode	VCR
Adjusting method	1) Set the data of address 0A5 at the address 80. 2) Connect TL1800 to GND. 3) Connect the Digital voltmeter to TL1801, and adjust the DC Volt.
Adjustment standard	6.85V \pm 50mV
Remarks	_____

8. COM-BIAS adjustment

Measuring point	LCD panel display surface
Address	03C
Mode	VCR
Adjusting method	1) Set data of address 0A5 at the address 80 and address 082 at the address A9. 2) Set the illuminometer (TOPCON IM-3) on the LCD panel surface (do not allow entry of external light). 3) Connect the illuminometer to the oscilloscope. 4) Make an adjustment so as to minimize the ripple of output waveform. Response time: 0.6 sec 5) Adjust again if longitudinal stripe appears evidently. 6) Set data of address 082 at the address 40. (Restore) * Or set to the point where the black is settled deepest with the grey scale signal.
Adjustment standard	Minimum
Remarks	Make an adjustment after aging for 5 minutes or more.

9. W/B adjustment

Measuring point	LCD panel display surface
Address	090, 092
Mode	VCR
Adjusting method	1) Set data of address 0A5 at the address 80, and address 082 at the address A9. 2) Adjust so as to get the same white screen as that of standard monitor. (Adjust again, visually checking as stated in item 3. 4.) 3) Set data of address 082 at the address 40. (Restore)
Adjustment standard	Standard monitor
Remarks	Make an adjustment after aging for 5 minutes or more.

6-4. ADJUSTMENT OF CAMERA SECTION




6-4-1. Servicing of camera section

(1) Object, measuring instrument and jigs necessary for camera section servicing

<ul style="list-style-type: none"> • Gray scale chart • Vectorscope • Extension cable • Oscilloscope • Video output cable 	<ul style="list-style-type: none"> • Color bar chart • Color temperature conversion filter HOYA "LB-165" • Digital voltmeter 	<ul style="list-style-type: none"> • Halogen light (2 pcs.) • Color video monitor • AC adapter • Service Remote Control
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Configuration

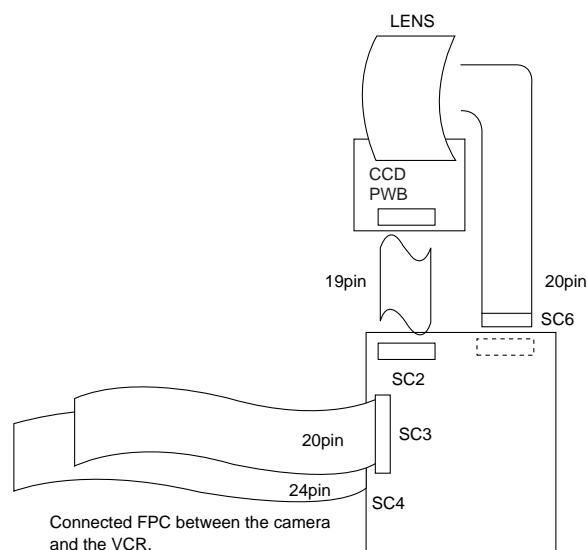
<Note: The entries of list> 1. Name 2. Part No. 3. Code

 <p>1. Gray Scale Chart (390 x 520 mm)</p> <p>2. JiGCHART-1</p> <p>3. CP</p>	 <p>1. Color Bar Chart (240 x 320 mm)</p> <p>2. JiGCHART-4</p> <p>3. DA</p>	<p>1. Color Temperature Conversion Filter</p> <p>2. JiGHOYA-LB165</p> <p>3. BN</p>	 <p>1. Service Remote Control</p> <p>2. RRMCG0033TASA</p> <p>3. BT</p>
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Note:

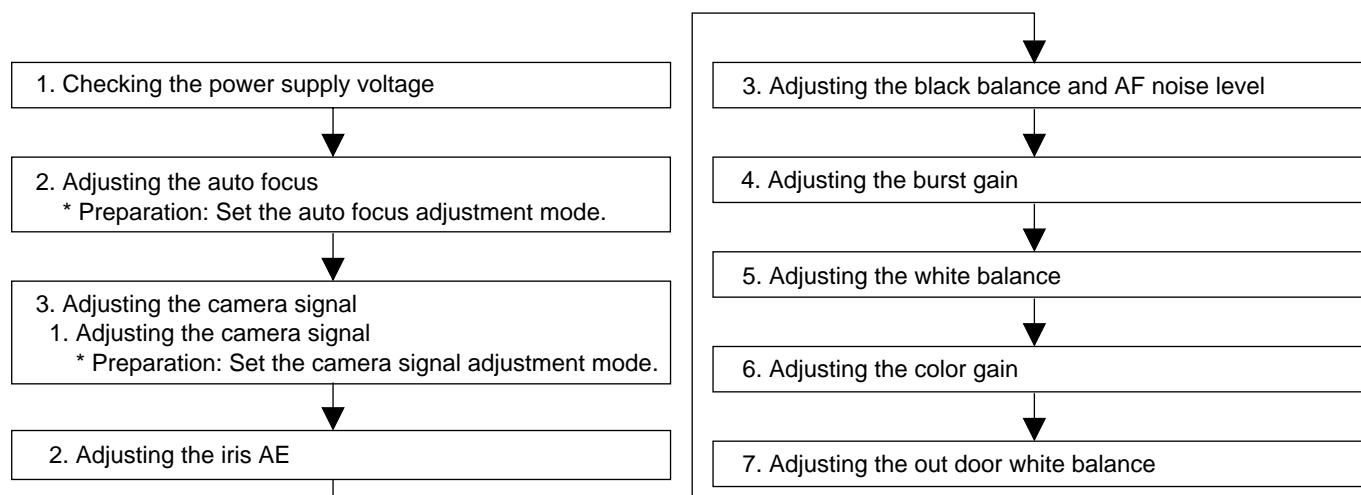
1. Color temperature conversion filter (jig item No.3) may be obtained from HOYA Optics in your local market.
2. N: Indicates the new jigs.

• Connections for Camera Section Servicing



6-4-2. Adjustment procedures

This adjusting procedure covers all the steps for conducting the adjustments all the way. There are some steps that may be skipped, depending on the specific needs for servicing and adjustment.



6-4-2-1. Checking the power supply voltage

- Measuring terminal:
 - P-CON 4.9V
 - P-CON 3.1V
 - CAM 15V
 - CAM -8V
 - LENS 5.7V
- Measuring instrument: Digital voltmeter

6-4-2-2. Auto focus adjustment

• Basic iris adjustment

Measuring instrument	None
Subject	—
Tape	—
Test point	None
Adjustment address	71
Adjustment level	09, 0A, 0B

DATA	Adjustment
09	Hall offset
0A	Iris offset
0B	Iris close

- Set up the auto focus adjustment mode. (Write 01 to the address 70)
- Write the adjustment data 09, 0A and 0B one after the other to the address 71, the adjustment are as above.

• Lens adjustment

Measuring instrument	None
Subject	More than 50 m away
Tape	—
Test point	None
Adjustment address	71
Adjustment level	12, 06, 08, 0D

DATA	Adjustment
12	Optical wide-end adjustment
06	Wide-end focus ∞ position adjustment
08	Tele-end focus ∞ position adjustment
0D	Zoom tracking adjustment

- Set up the auto focus adjustment mode.
(This is unnecessary after the above basic iris adjustment has been made.)
- Write the adjustment data 12, 06, 08 and 0D one after the other to the address 71. The adjustments are as above.

Write FF to the address 70 to exit the auto focus adjustment mode.

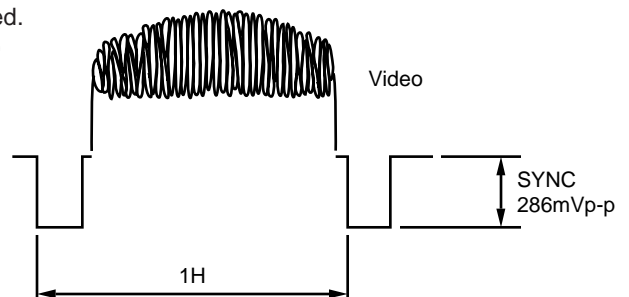
6-4-2-3. Adjustment of Camera signal

- Before starting these adjustment, auto focus adjustment must be finished.
- Set up the camera signal adjustment mode (Write 00 to the address 70)

1. Sync level adjustment

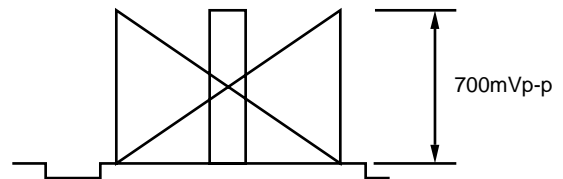
Measuring instrument	Oscilloscope
Subject	Anything
Tape	—
Test point	VIDEO OUT (Terminated in 75 Ω)
Adjustment address	74
Adjustment level	286mVp-p

- Connect the oscilloscope to the VIDEO-OUT. Adjust the sync level to 286mVp-p.



2. Iris AE adjustment

Measuring instrument	Oscilloscope
Subject	Gray scale
Tape	—
Test point	VIDEO-OUT
Adjustment address	9C
Adjustment level	700mVp-p



- Shoot the gray scale in the standard way. Observe the VIDEO-OUT signal on the oscilloscope screen and rewrite the data of address 9C to get an amplitude of 700mVp-p as shown above.

3. Black balance , AF noise level adjustment

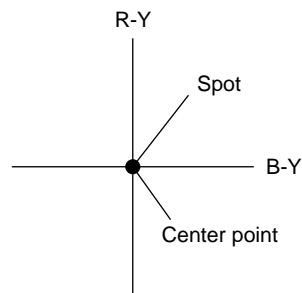
Measuring instrument	None
Subject	Anything
Tape	—
Test point	None
Adjustment address	71
Adjustment level	01

- Write the data 01 to the address 71.
The following adjustments are automatically carried on ;
① Black balance adjustment
② AF noise level adjustment
at AGC Gain Min , AGC Gain Max and Gain up.

4. White balance adjustment

Measuring instrument	Vector scope
Subject	Gray scale
Tape	—
Test point	VIDEO OUT (Terminated in 75 Ω)
Adjustment address	R-W/B 00, B-W/B 02
Adjustment level	R-W/B 0 % \pm 3 % B-W/B 0 % \pm 3 %

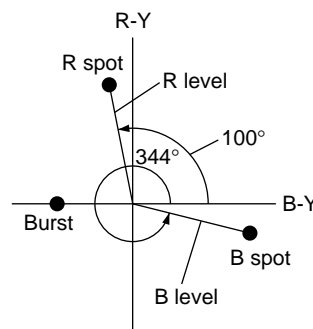
- 1) Adjust the spot to the center of vector scope (R-Y : 0%, B-Y : 0%) using address 00 and 02.



5. Color gain adjustment

Measuring instrument	Vector scope
Subject	Color bar chart
Tape	—
Test point	VIDEO OUT (Terminated in 75 Ω)
Adjustment address	R GAIN 1C4 B GAIN 1C2 R MAT 1C0 B MAT 1BE
Adjustment level	R GAIN; Burst ratio 1.2 \pm 0.1 B GAIN; Burst ratio 1.0 \pm 0.1 R MAT; 100 \pm 2° B MAT; 344 \pm 2°

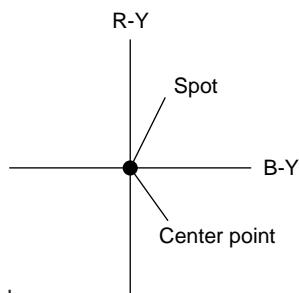
- 1) Using the address 1C4, adjust the R level to a burst ratio of 1.2. With the address 1C2, adjust the B level to a burst ratio of 1.0.
- 2) Using the address 1C0, adjust the R phase to 100°. With the address 1BE, adjust the B phase to 344°.
- 3) Repeat the above steps 1) and 2).



6. Out door white balance adjustment

Measuring instrument	Vector scope
Subject	Gray scale
Tape	—
Test point	VIDEO OUT (Terminated in 75 Ω)
Adjustment address	R-OUT DOOR 6C B-OUT DOOR 6E
Adjustment level	R-OUT DOOR; 0 \pm 3 % B-OUT DOOR; 0 \pm 3 %

- 1) Attach the color temperature conversion filter (JiGHOYA-LB165) to the front of the lens.
- 2) Using the addresses R-OUT DOOR 6C and B-OUT DOOR 6E, adjust the spot to the center.
- 3) Take off the color temperature conversion filter.



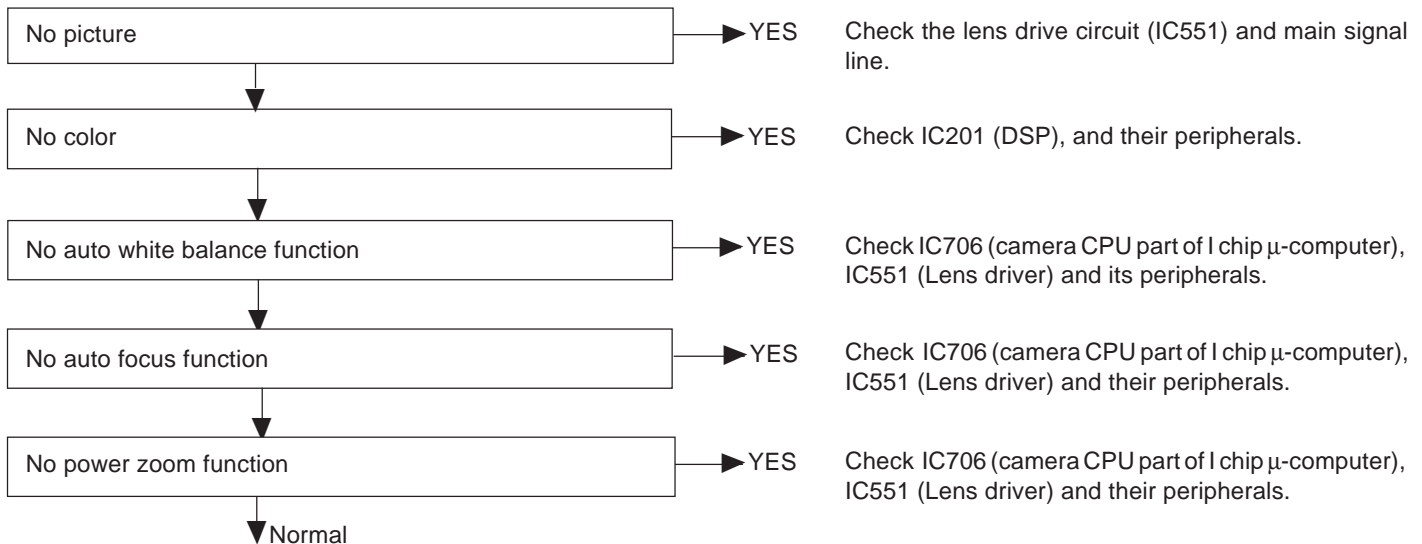
When you have finished, write FF to the adress 1FE to exit camera signal adjustment mode.

6-5. TROUBLE SHOOTING

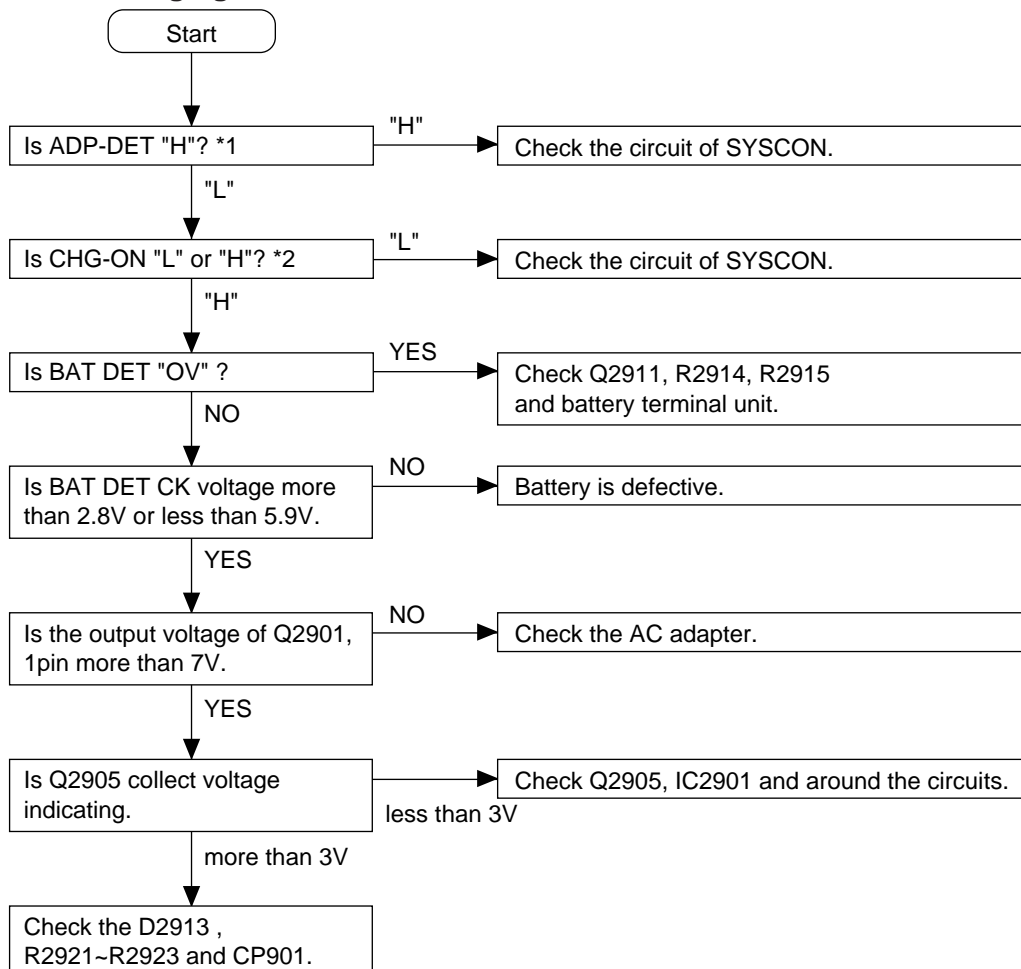
6-5-1. Classification of troubles



6-5-2. Troubleshooting for the camera section



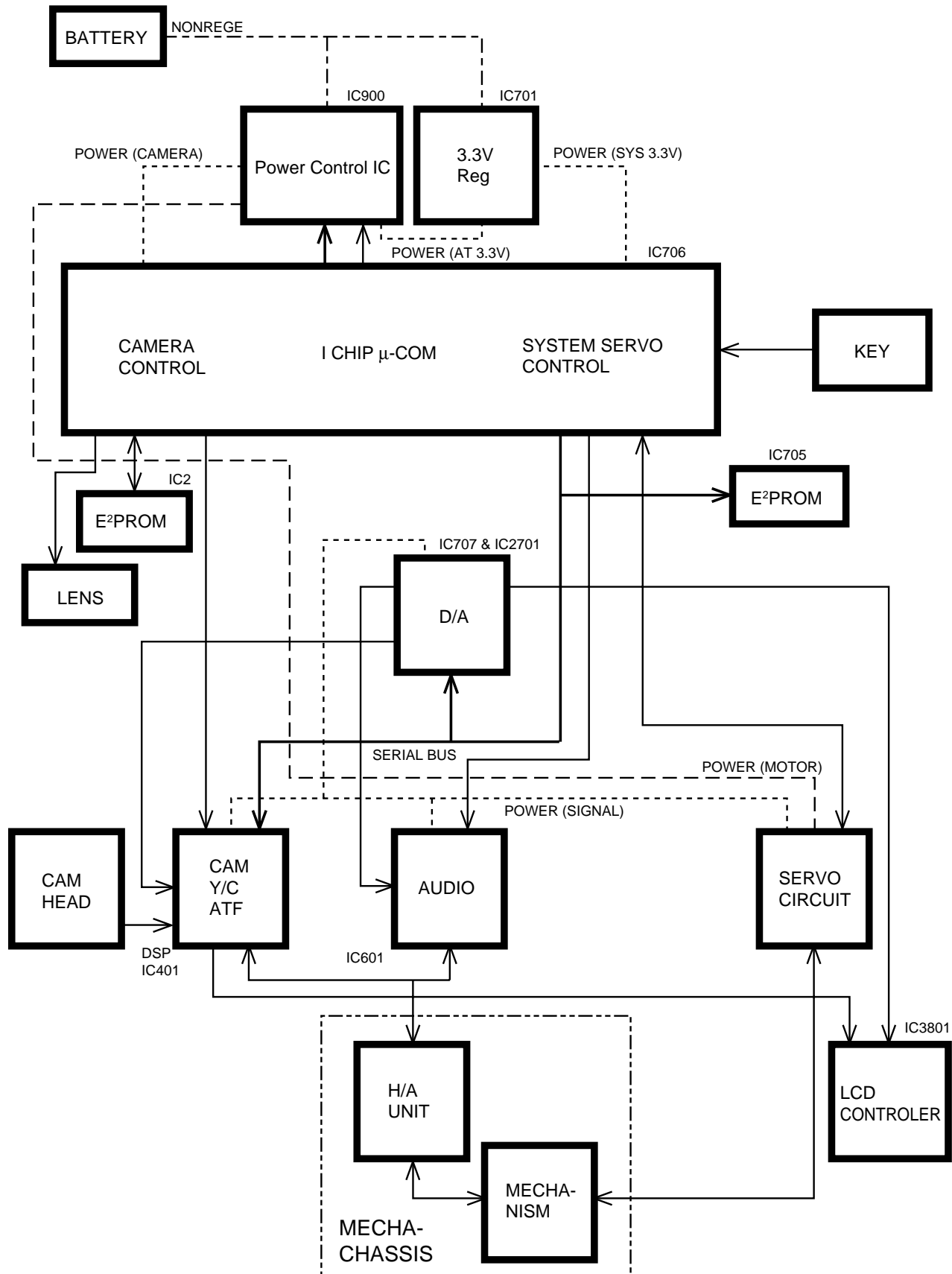
6-5-3. Charging mode troubles



*1: Inputting DC power and set the ADP DET "L".

*2: Inputting charging mode as CHG ON "H".

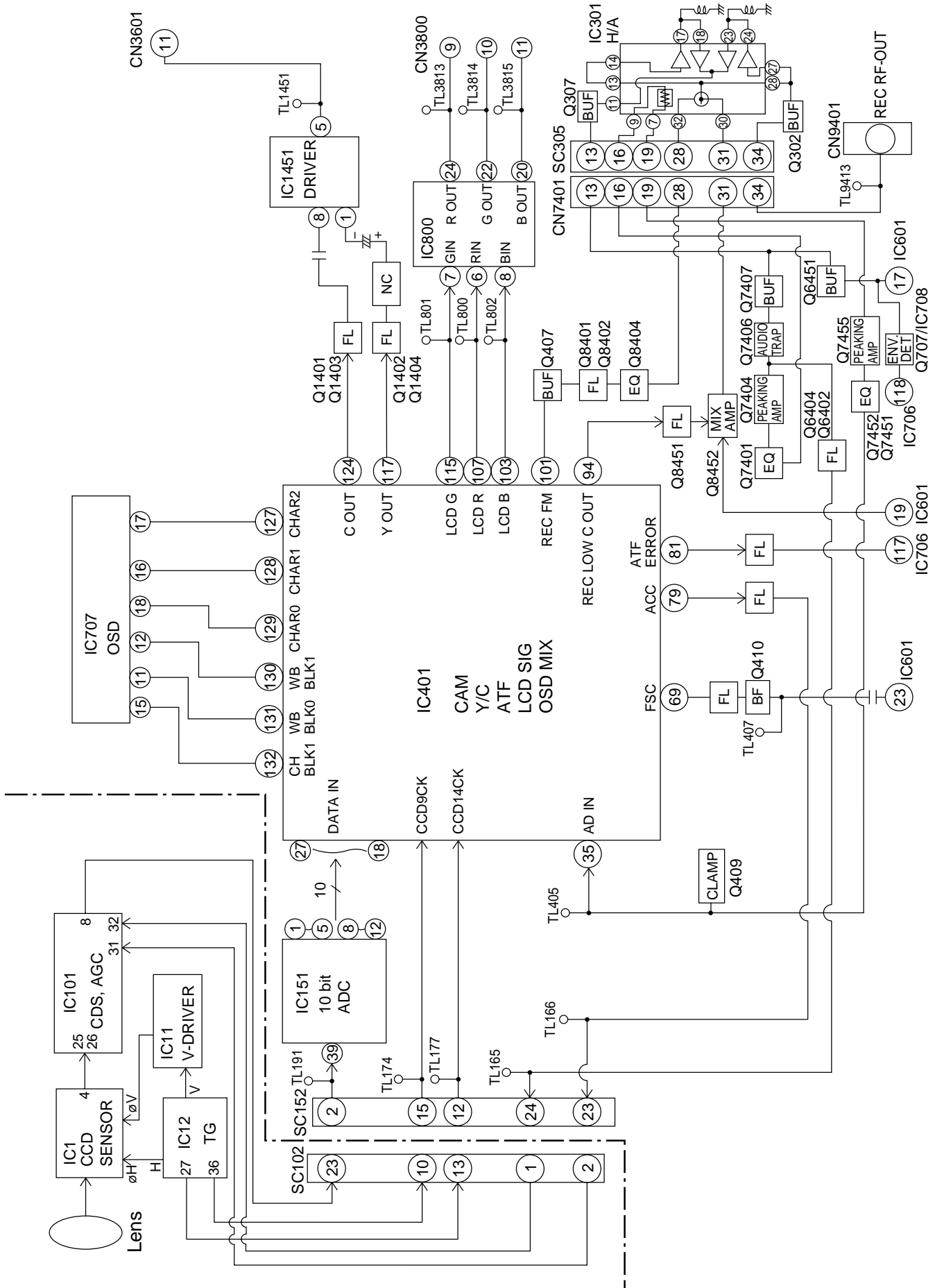
7. SYSTEM BLOCK DIAGRAMS



* On this model, all the circuits of the VCR and camera sections are controlled by IC706.

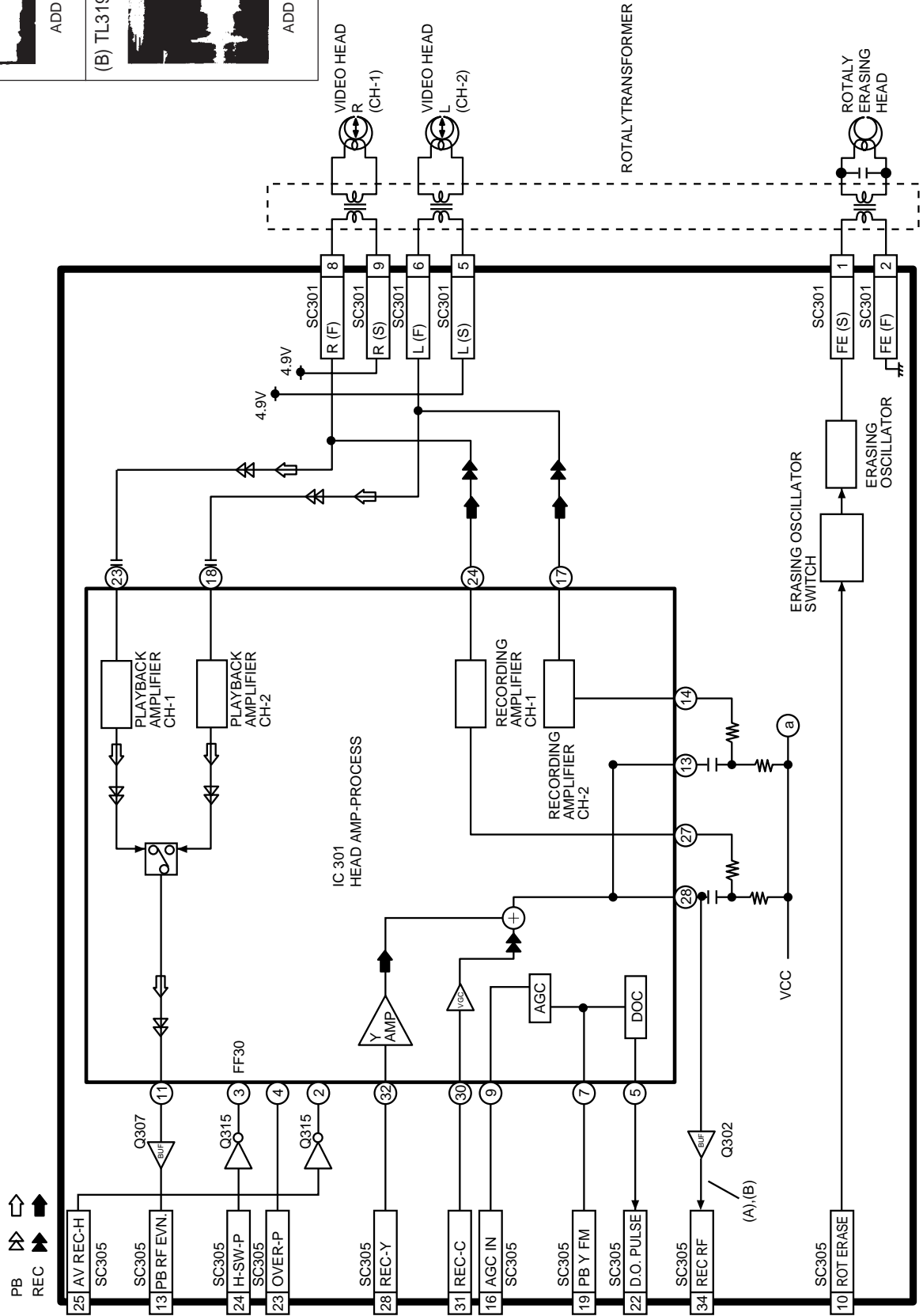
- 1) IC401 are controlled with the serial data from IC706.
- 2) IC703 is a memory that serves to store the adjustment data of the VCR section.
- 3) IC2 is a memory that serves to store the adjustment data of the camera section.
- 4) The other circuits and ICs are under the L/H level or the PWM control.

7-1. VIDEO SIGNAL BLOCK DIAGRAM

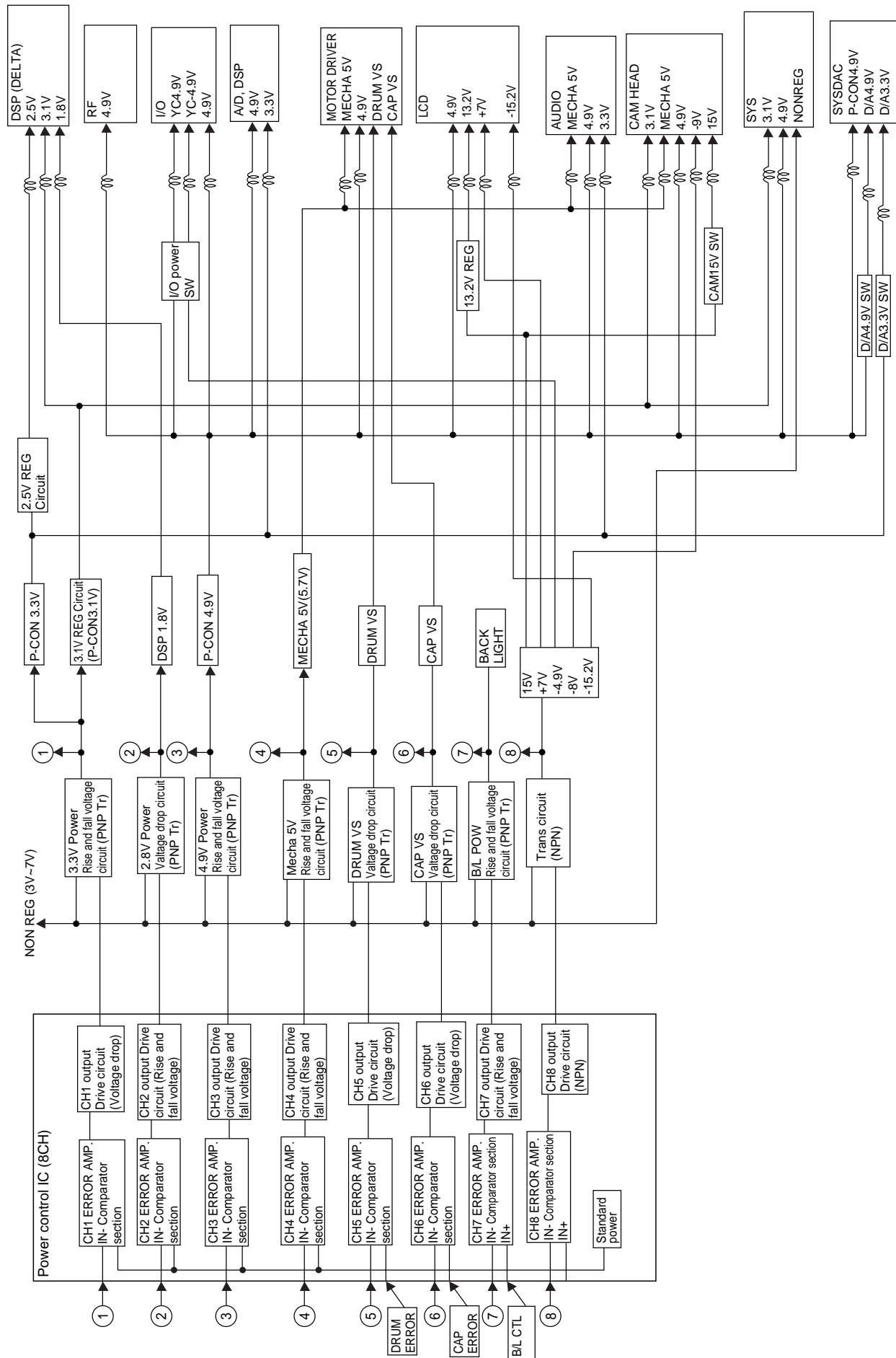


7-2. HEAD AMP BLOCK DIAGRAM

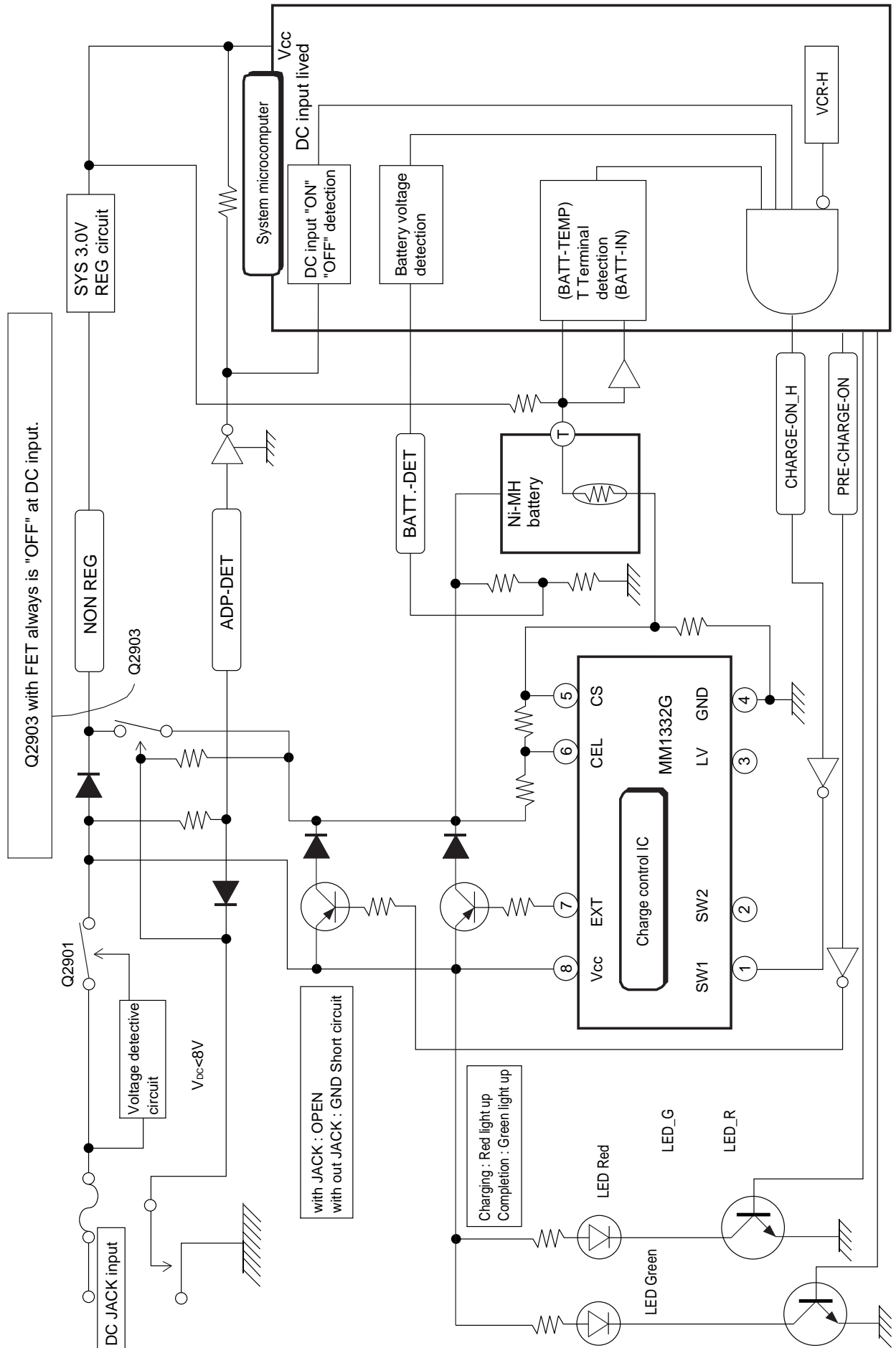
Signal waveform



7-3. POWER SYSTEM BLOCK DIAGRAM

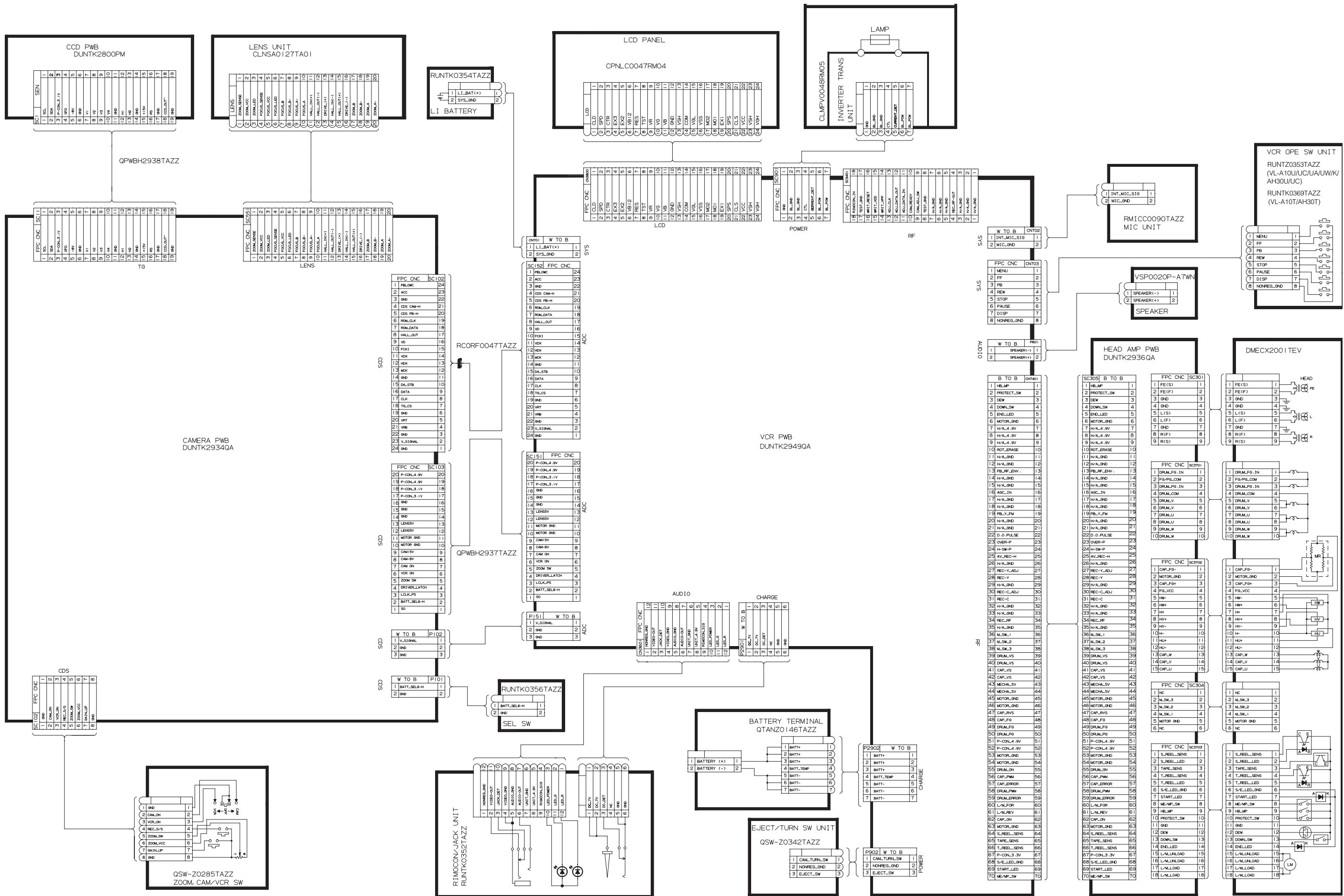


7-4. MAIN BATTERY CIRCUIT SECTION BLOCK DIAGRAM

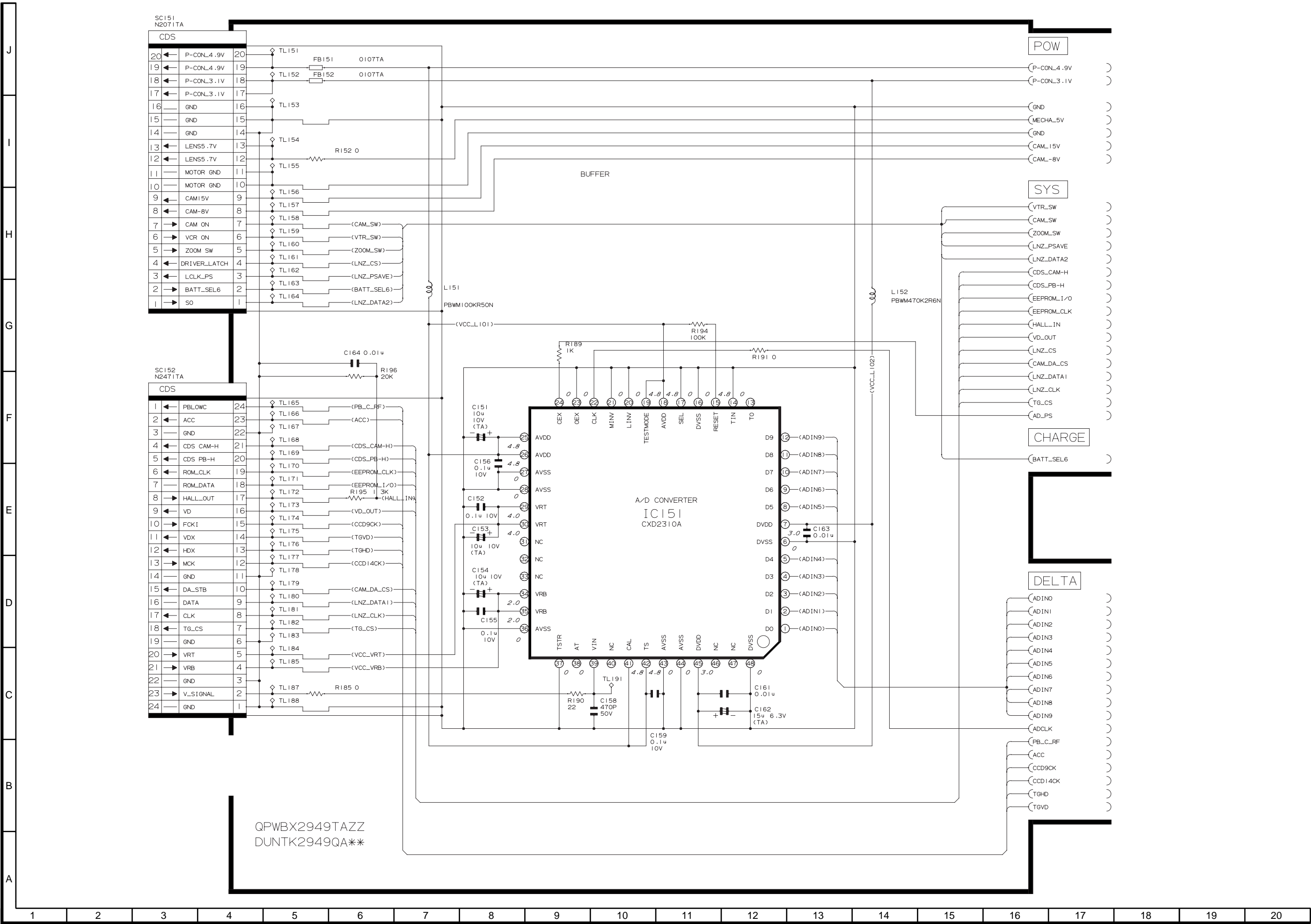


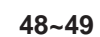


8. SCHEMATIC DIAGRAMS 8-1. OVERALL SCHEMATIC DIAGRAM



8-2. ADC SCHEMATIC DIAGRAM

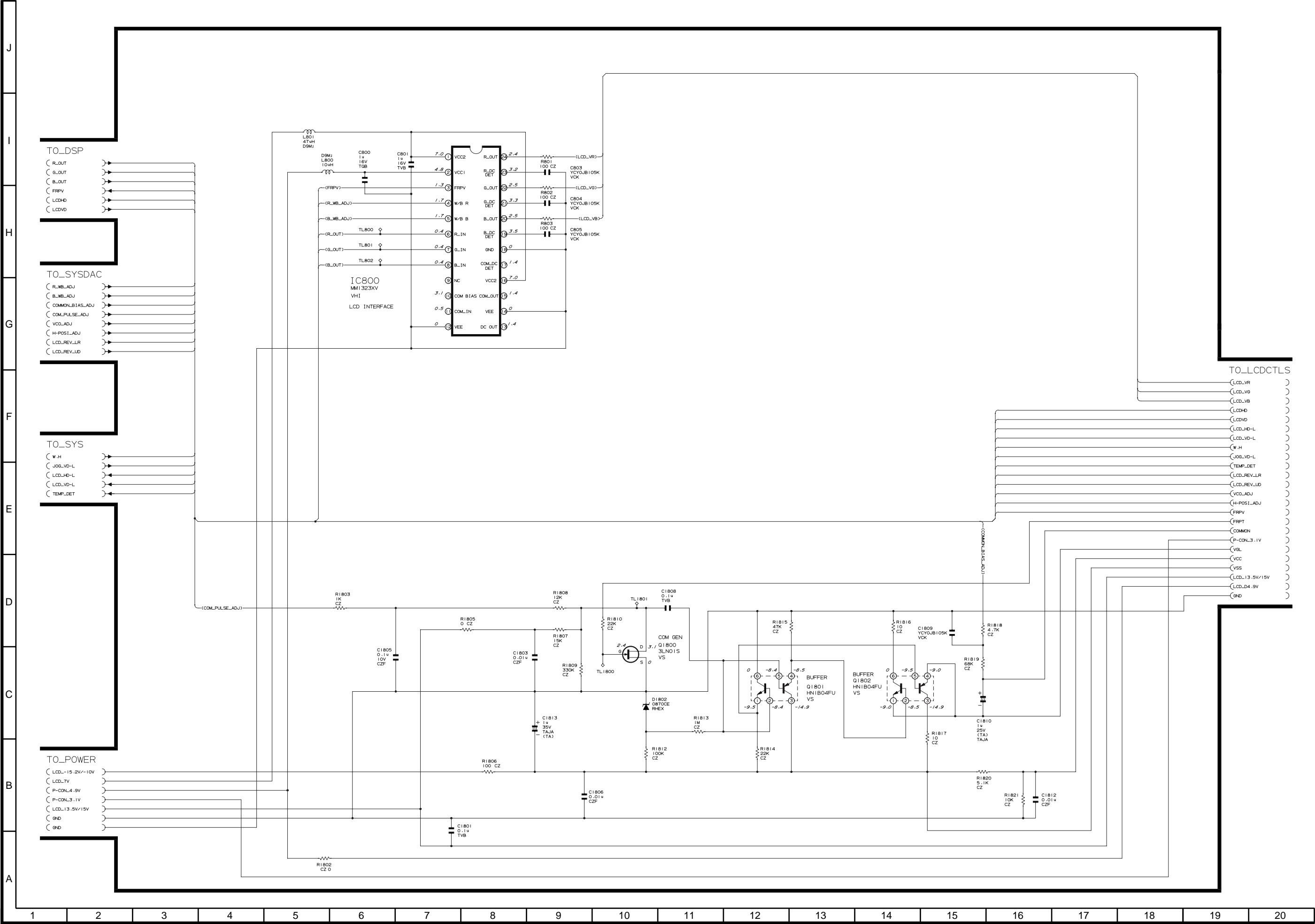


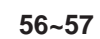


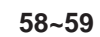




8-6. LCD_INT SCHEMATIC DIAGRAM

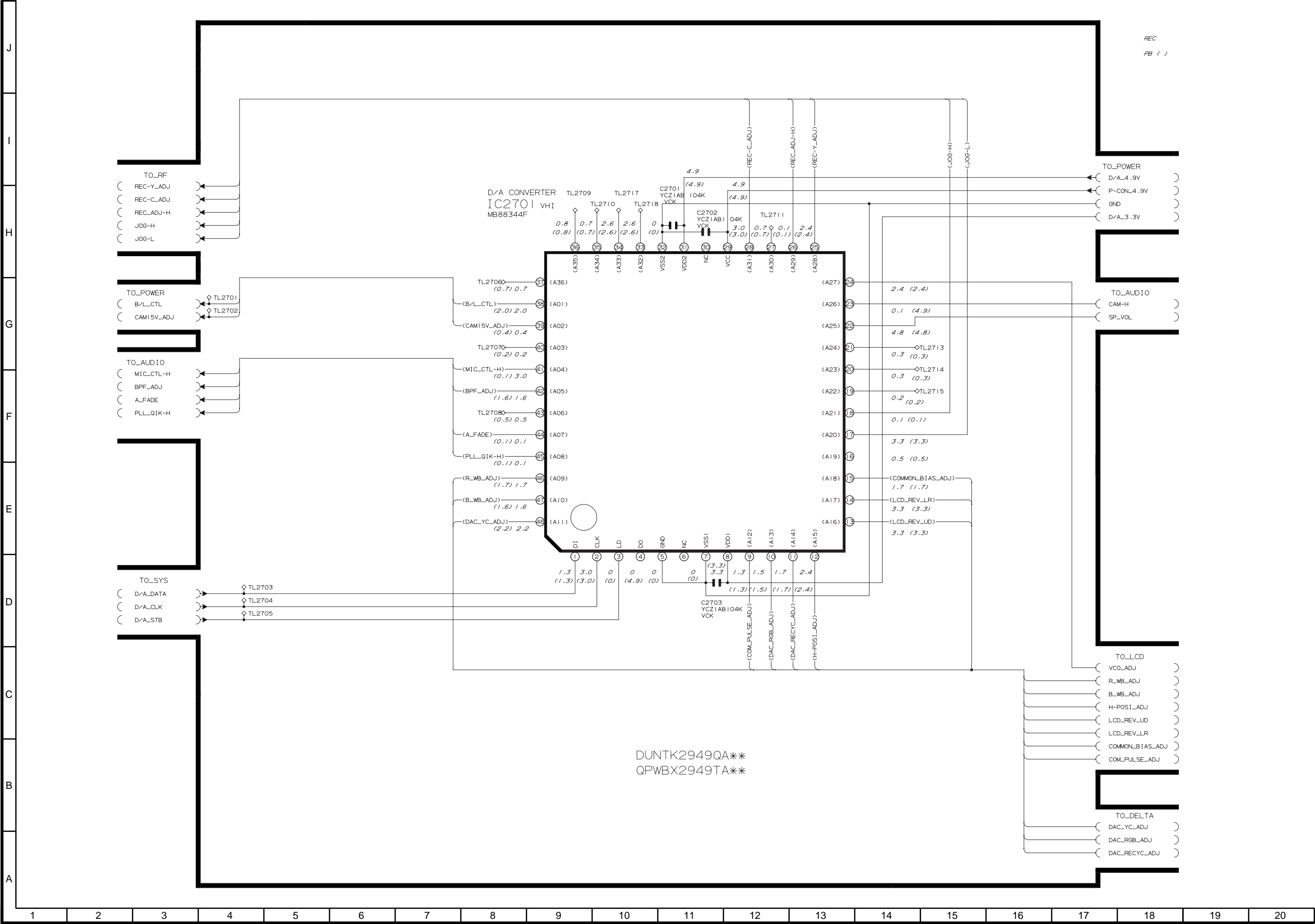






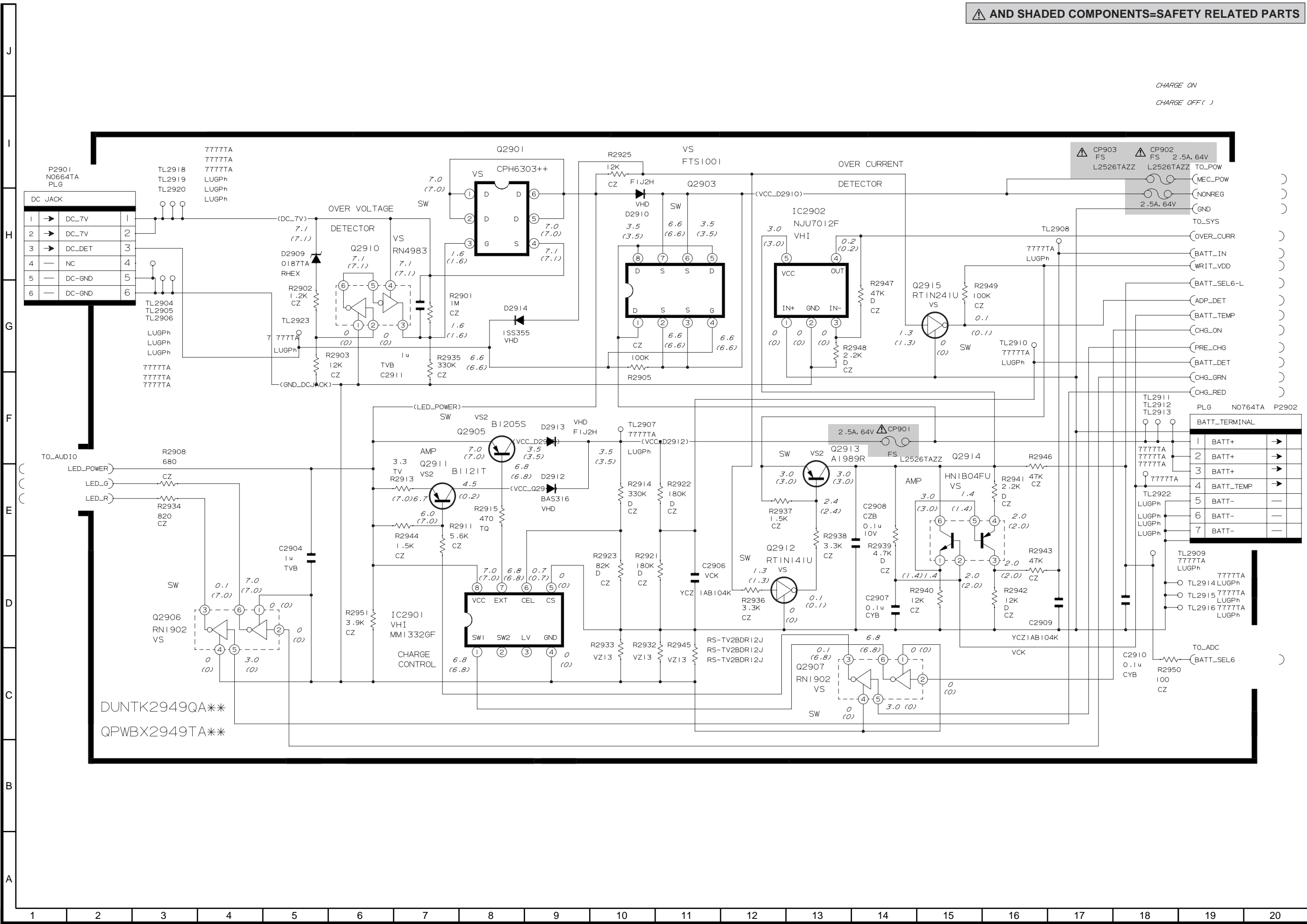


8-10. SYSDAC SCHEMATIC DIAGRAM



8-11. CHARGE SCHEMATIC DIAGRAM

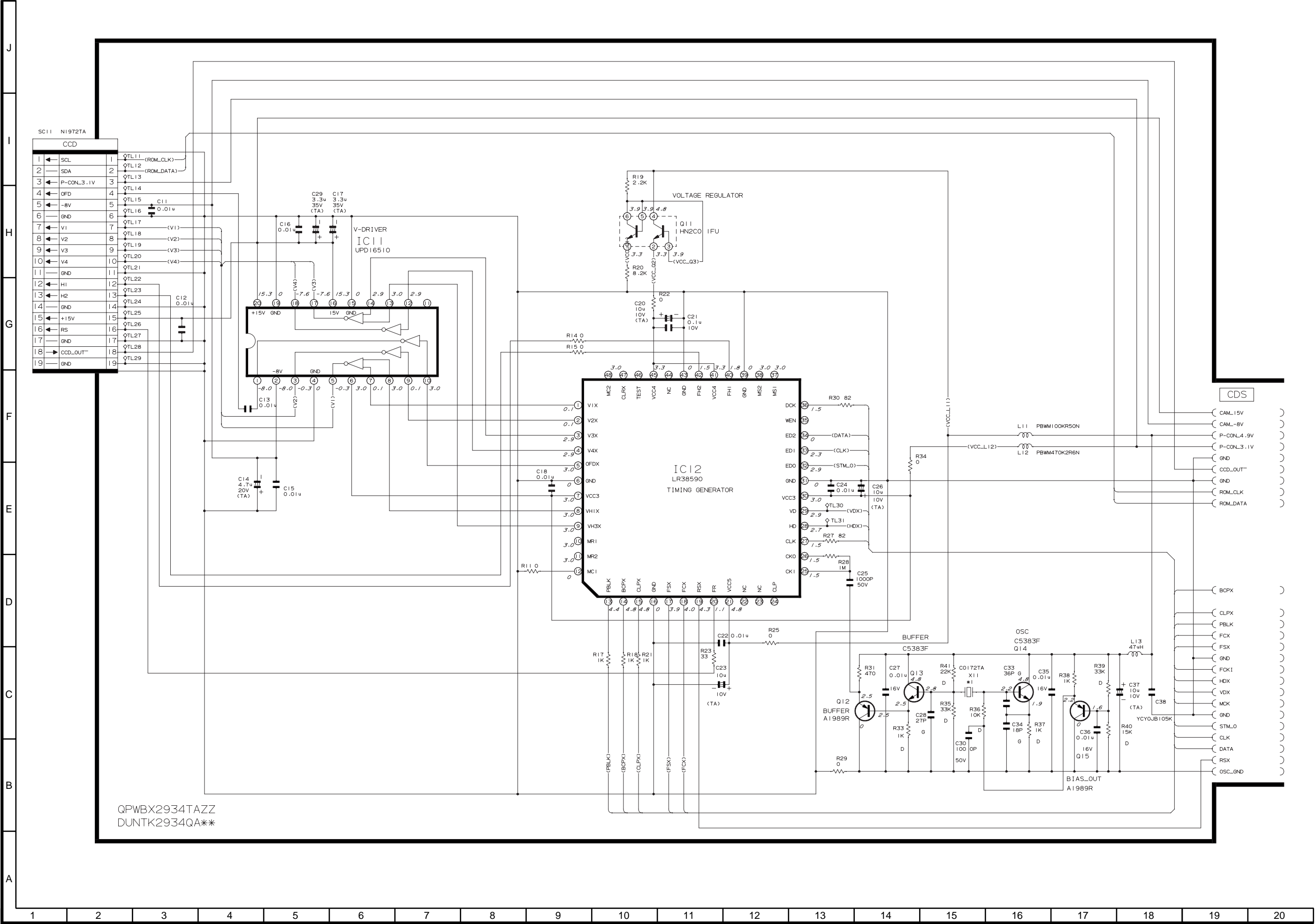
⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS



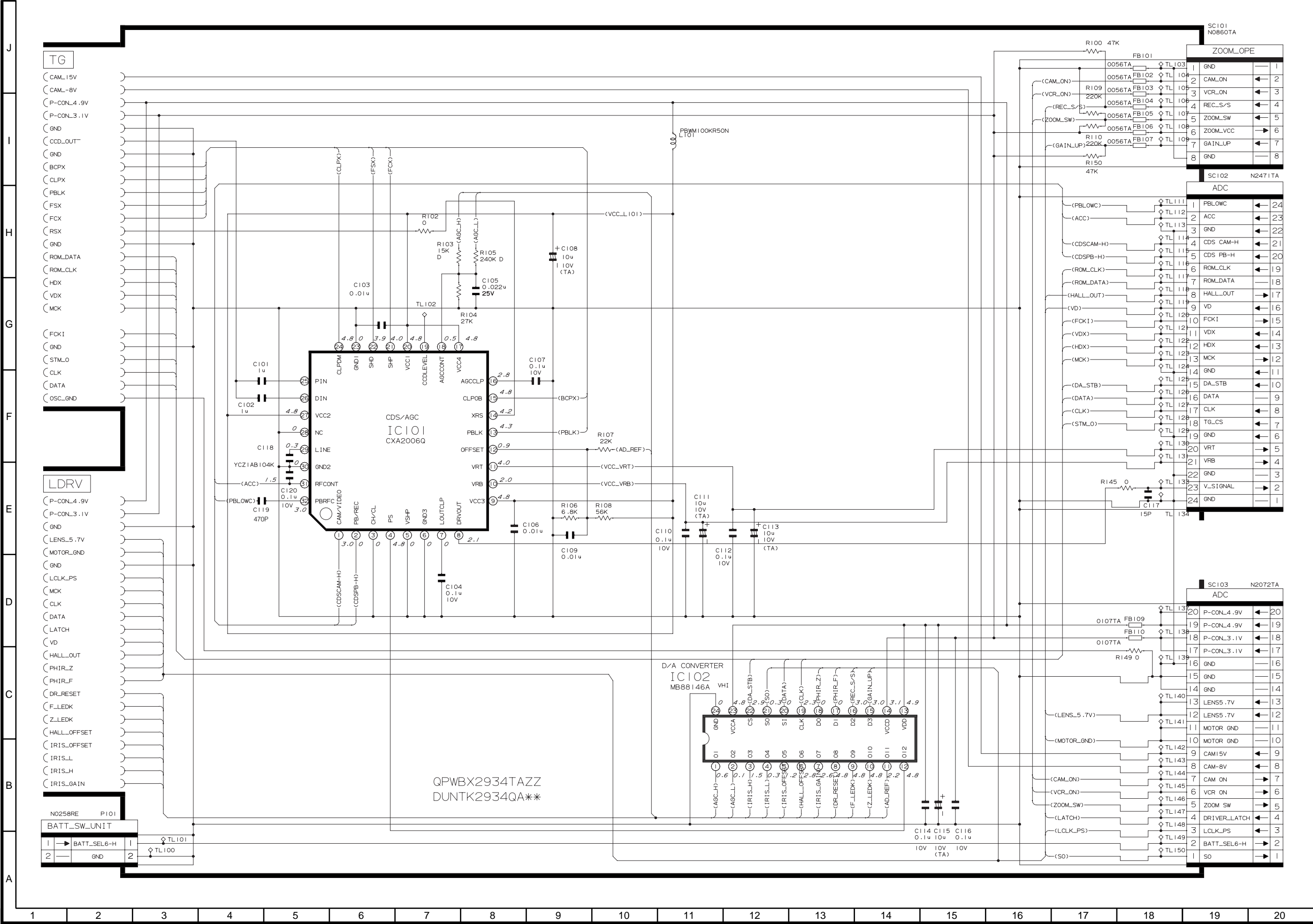




8-14. TG SCHEMATIC DIAGRAM

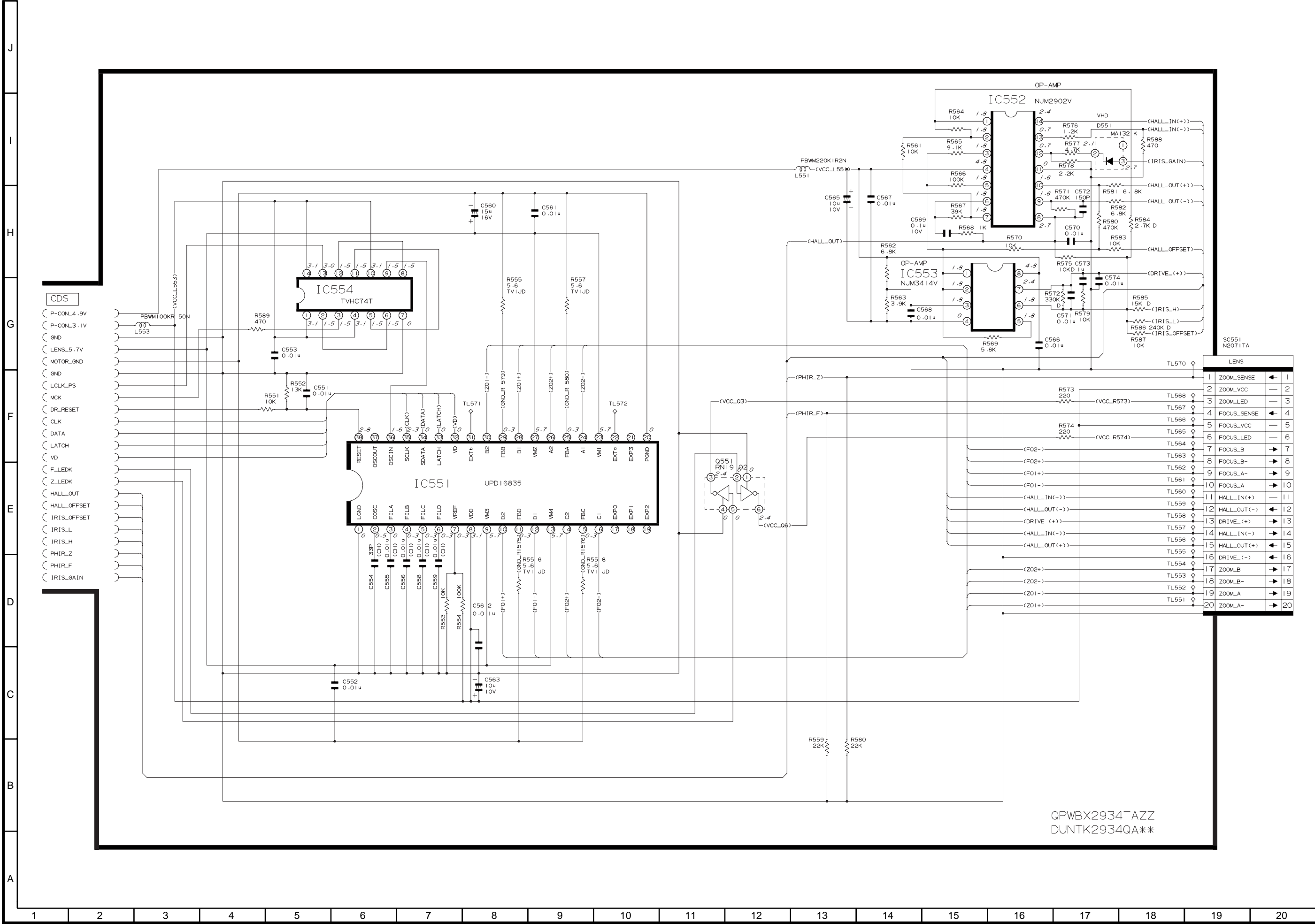


8-15. CDS SCHEMATIC DIAGRAM



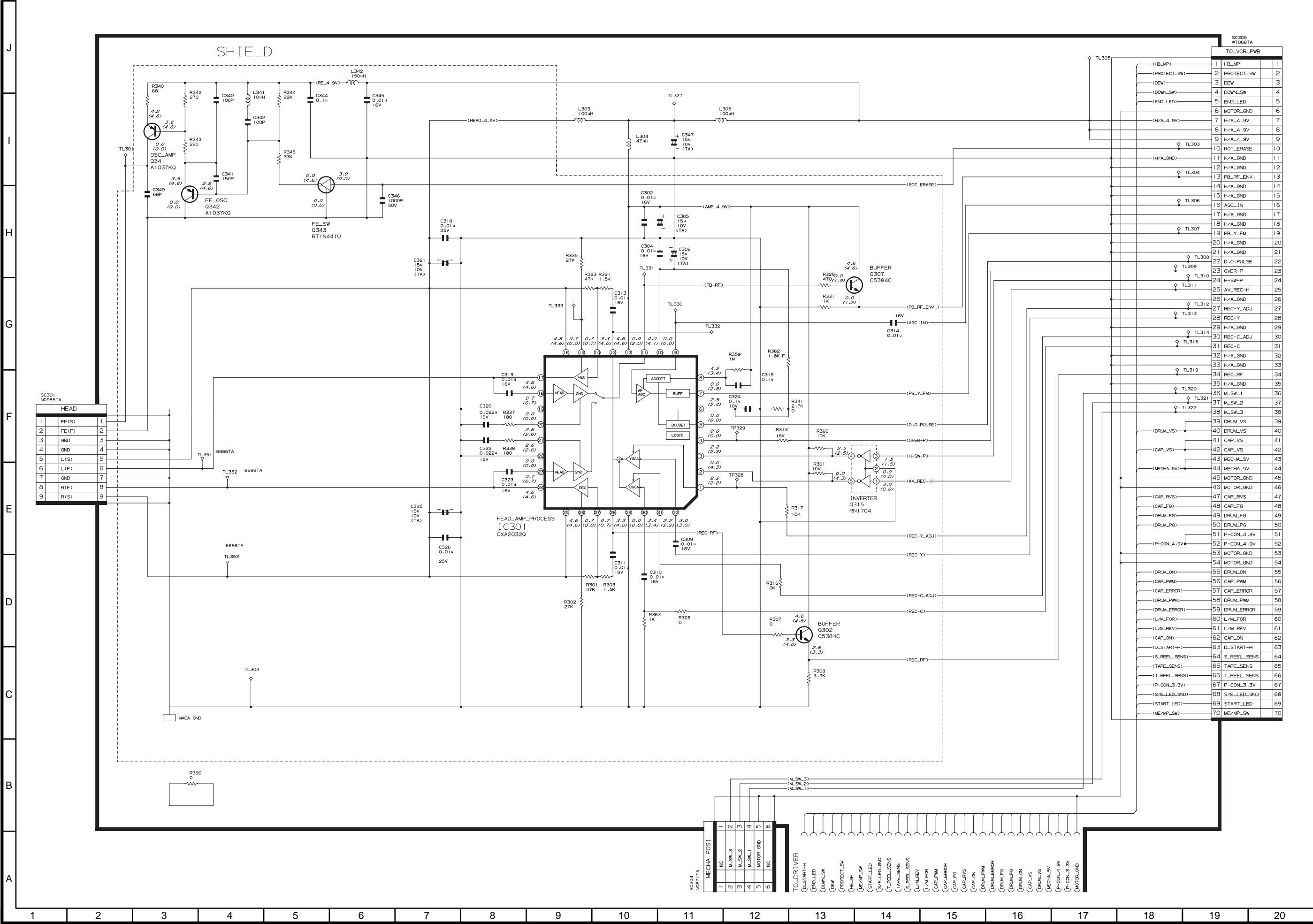
VL-A10U/UC/UA/UW/T/K
VL-AH30U/UC/T

8-16. LDRV SCHEMATIC DIAGRAM

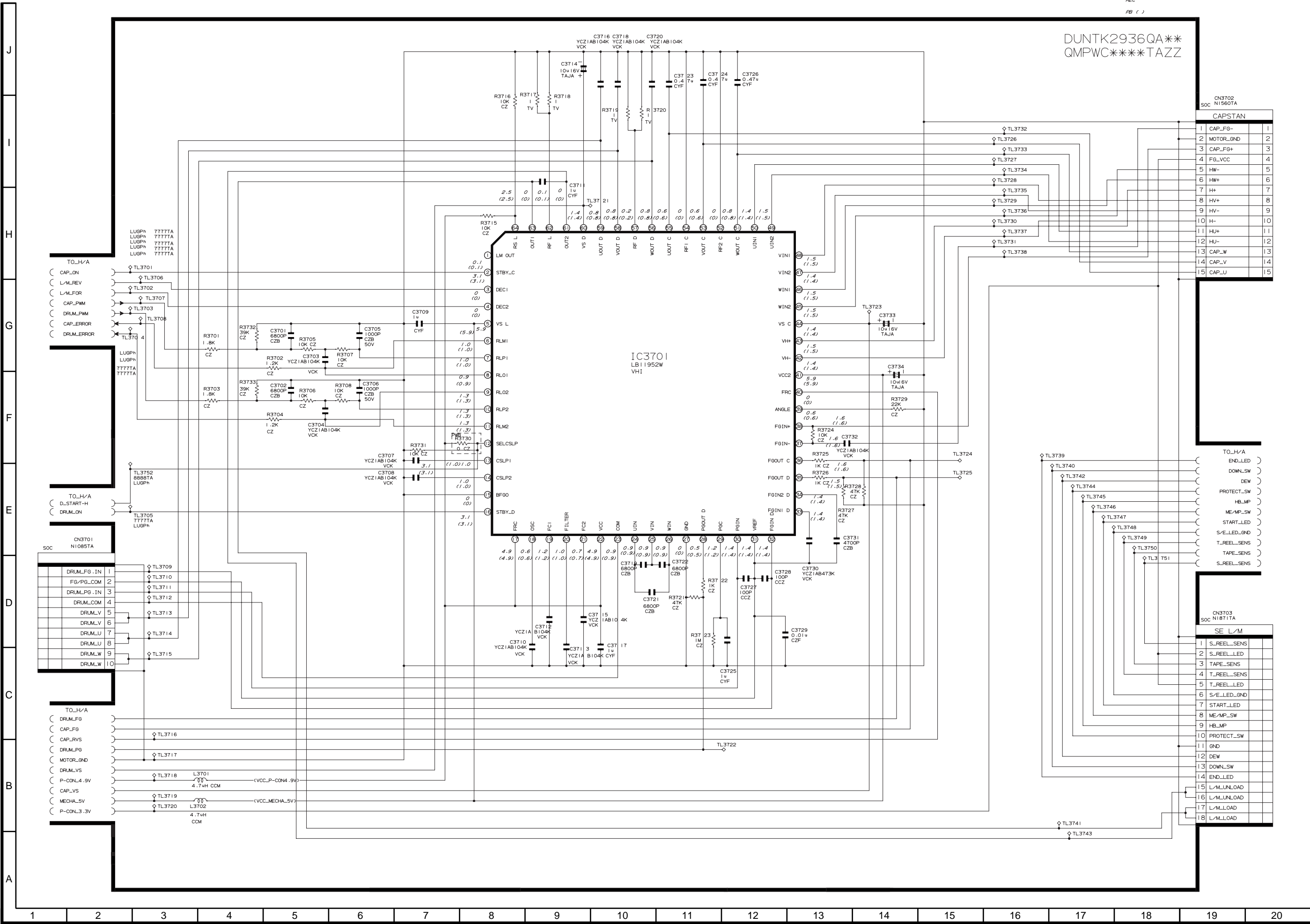


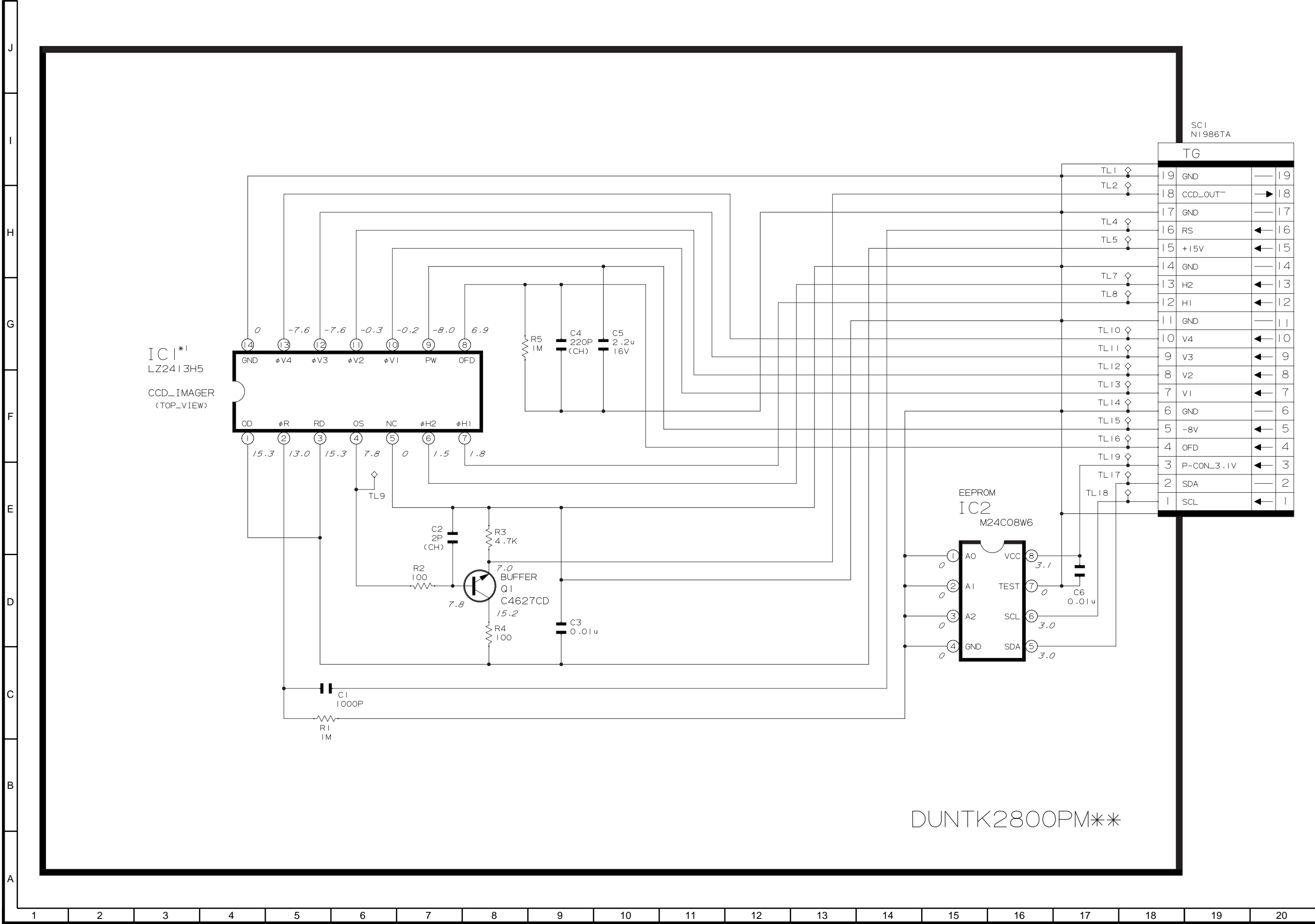
QPWBX2934TAZZ
DUNT2934QA**

8-17. HEAD AMP SCHEMATIC DIAGRAM

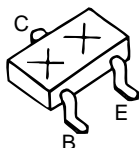


8-18. MOTOR DRIVER SCHEMATIC DIAGRAM

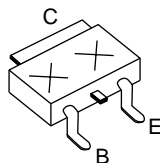




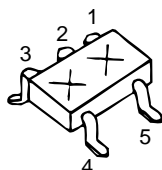
9. SEMICONDUCTOR LEAD IDENTIFICATION



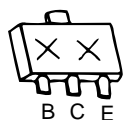
2SA1577R	2SA1362GR	DTA144EE
2SA1774F	2SA1989R	CPH3209
2SB12956	2SC5383F	CPH3109
2SC4617B	2SC5384C	RT1P241U
2SC4738Y	RT1P141U	RT1P441U
2SD2216	RT1N441U	RT1N241U
FMMT717	DTD123TK	RT1N141N
ZH431F01	2SC4627CD	RT1P140U
2SC3931C	2SB1197KQ	RT1N140U
CPH3106	2SD1819A	
2SD1979S	DTC144EE	
2SC4116Y	UN9111	
2PC4617R	UN9214	



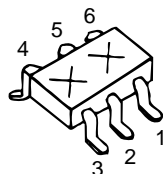
2SD1805



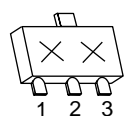
FMG12	RN5RL43	2SC4944Y
UMG2	TC7SL04U	RN2702
UMG5N	NJM2107F	RN2703
XP1B301	TA75S01F	RN2704
XP1213	TC7S08U	RN1702
S81230SG	TA7SL02U	RN1703
XPIC301	NJU7012F	RN1704
PST597KN	2SA1873Y	



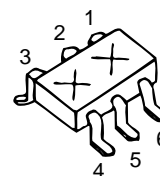
2SB1121T
2SB1302S



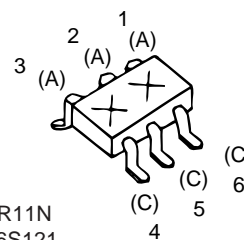
IMX9
XN4604
IMD16A
XN4404



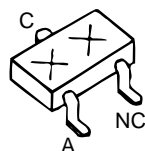
RH5RE58A



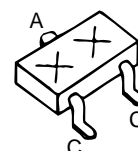
RN1902	RN4984	XP4311
RN1903	RN4990	XP4316
RN1904	RN2902	XP4113
CPH6303	RN2903	HN1B01FU
HN1B04FU	RN2904	XP4501
HN1A01FU	UMB2	UMZ1
HN2A01FU	UMD12N	XP4601
HN1C01FU	UMT2	UMD6
HN2C01FU	UMX2	UMD3
RN4982	UPUMZ1	UPUMX1
RN4983	XP6501	



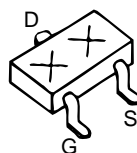
UMR11N
MA6S121



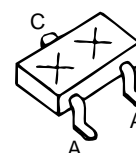
DA121



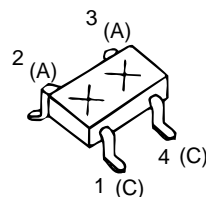
MA704WA



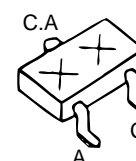
SI2301DS



DAN222



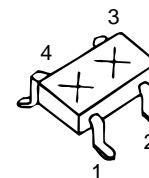
DA227



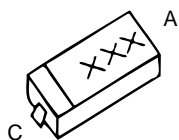
DA221
MA147
MA133



NJM79L09

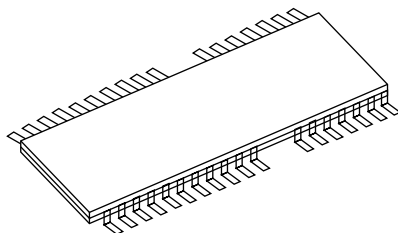


PST592KM

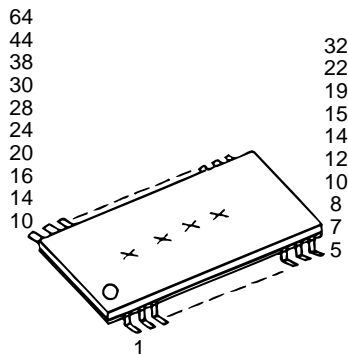


MA729
MA2S111
F1J2H
HVU350B
HVU359TR
F02J9

EX0161TA
EX0210TA
EX0870CE
HVU362
KV1812K
FS1J2E



IX0616TA

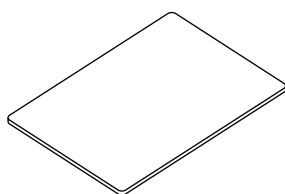
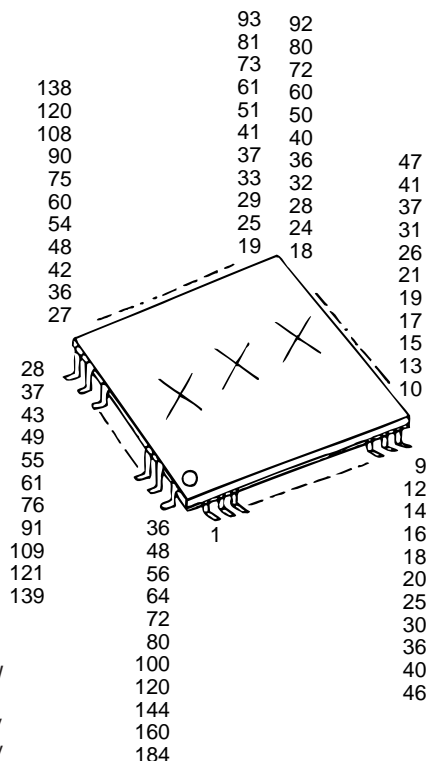


CXA2096N
MS548331
MM1323XV
BU4051FV
LA7473V
PCMB3006T
M40C558V
T7A164S
UPD16510

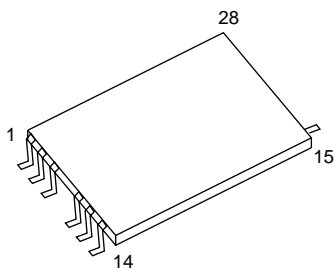
NJM2904V
IX0468TA
IX0613TA
NJM2902V
NJM3414V
MB8346BV
BU2090FS
IX0768TA

IX0756TA
IX0775TA
ADS933Y
IX0474TA
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IX0469TA
BH7268KV
IX0605TA
IX0606TA
IX0607TA
MB3785V
FA3675F

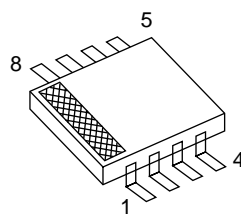
LB11952W
IX0759TA
BA7761KV
BH7273KV
LR38610
BH7272KV
MB88344F
UPC2391G
LB1990W
MM1449XQ
MB86611
C111306F



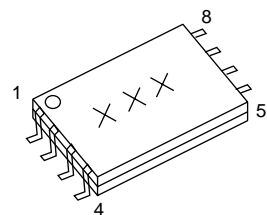
IX0494TA



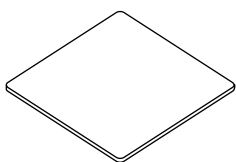
IX0560TA



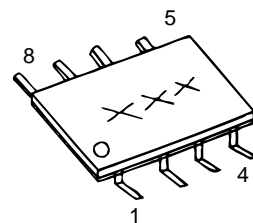
TK15440M



S84235F
MM1116FS



IX0604TA
IX0629TA
IX0630TA
IX0625TA
IX0608TA
IX0620TA
M5412450

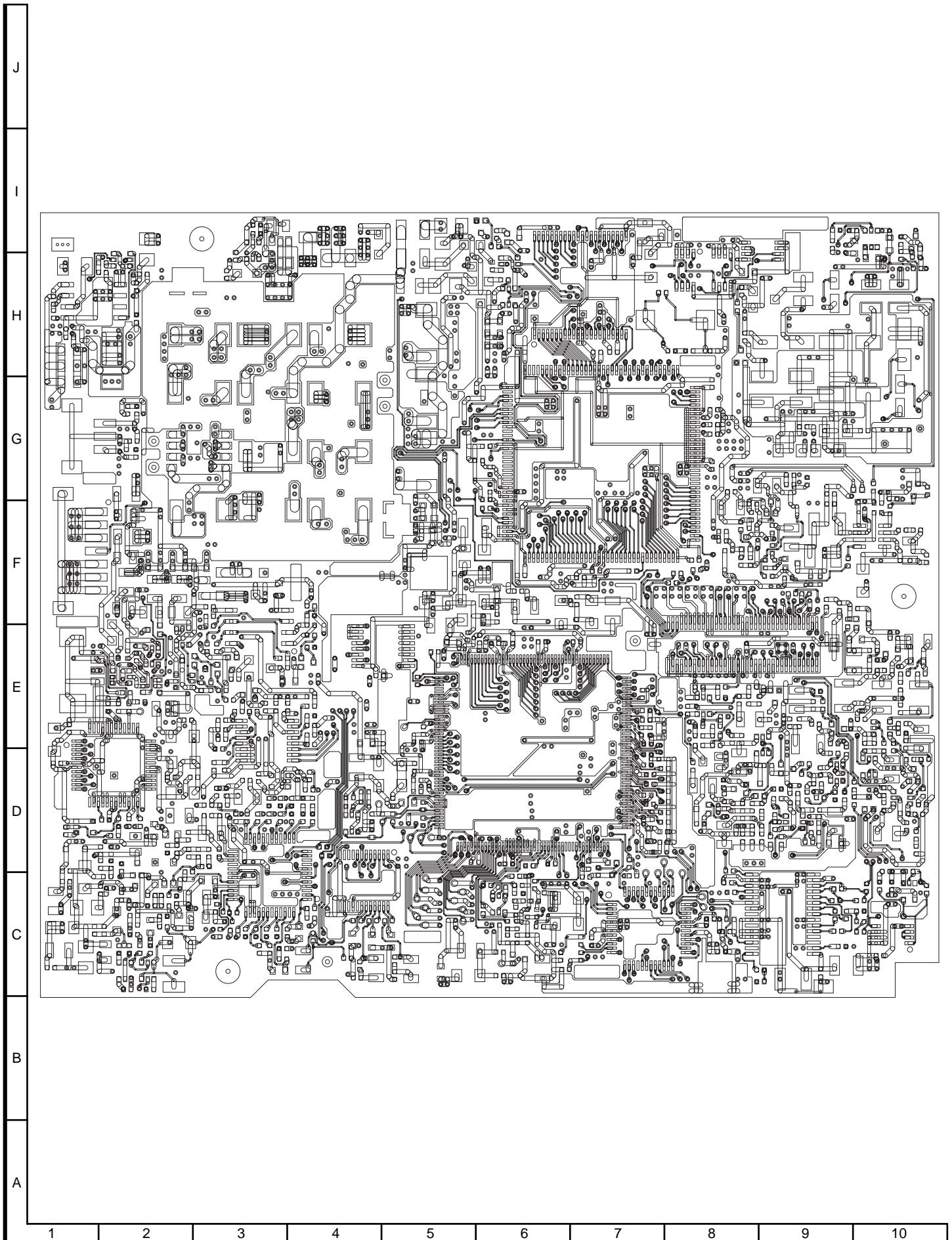


S84235F
S24C02A
TA75W558
MM1332G
TC7W14U
TC7W74U

TC7W74U
TC7W08U
TC4W53U
24LC8BIN
TC7WH74U
TC7W66U

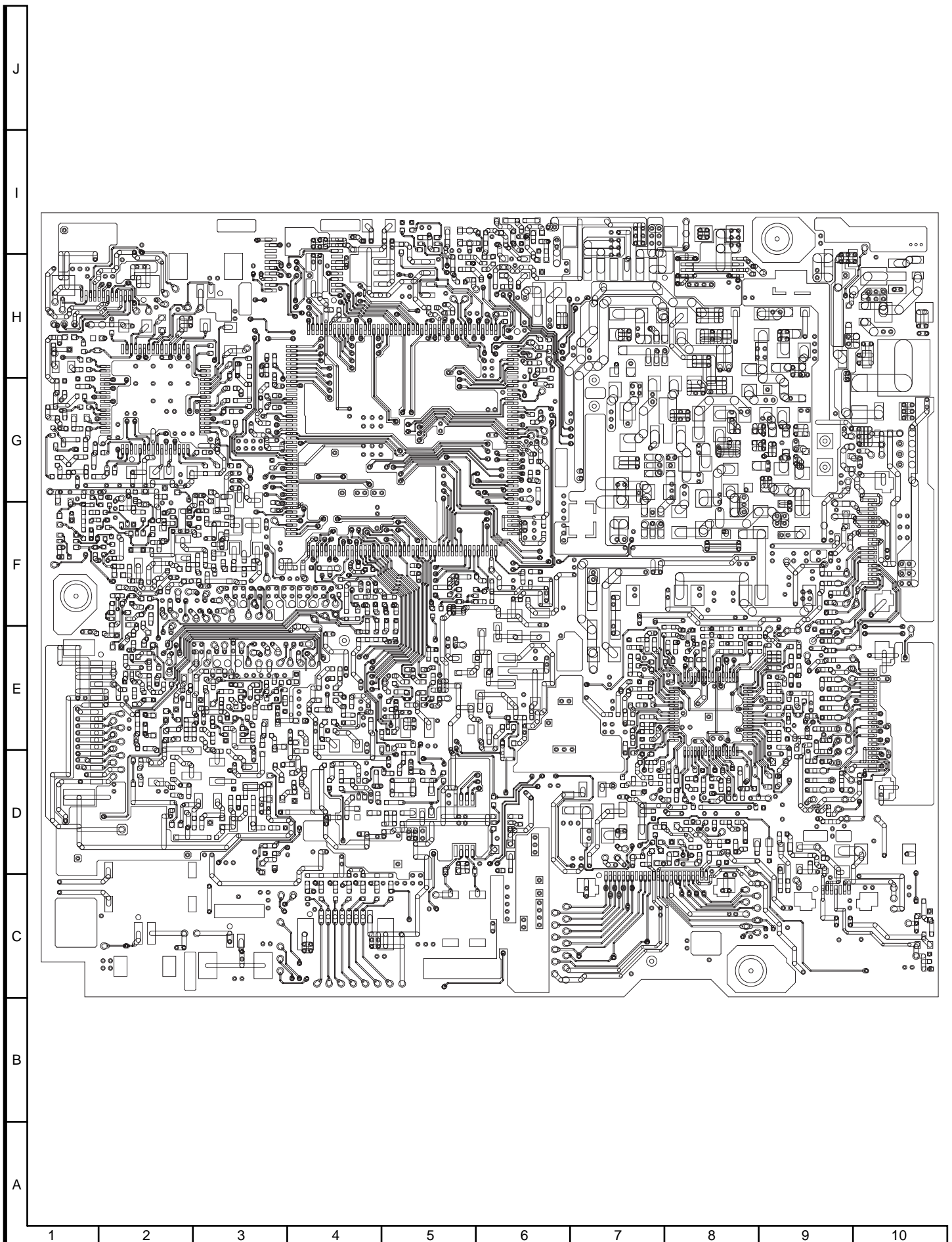


VCR PWB Wiring Side SIDE A

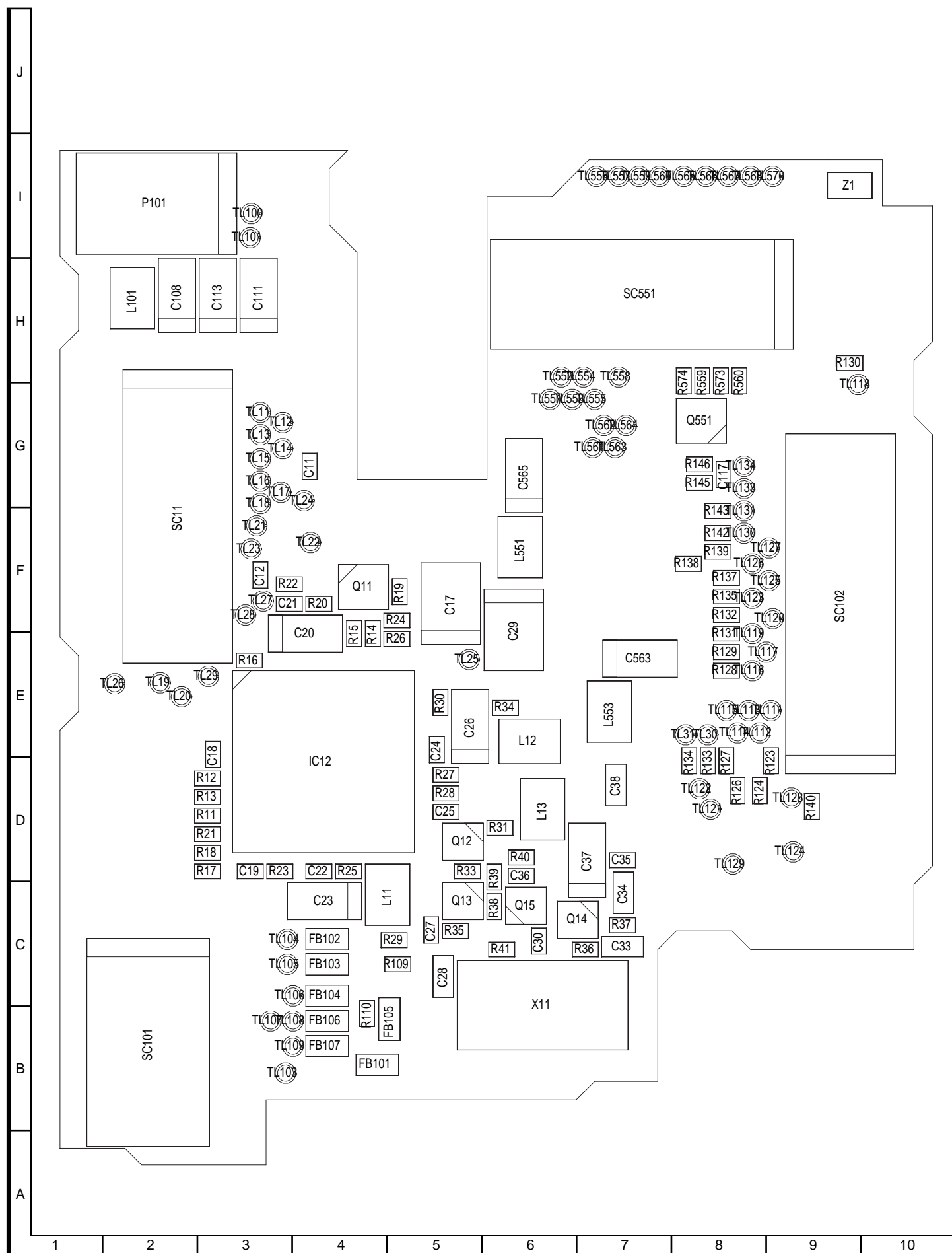




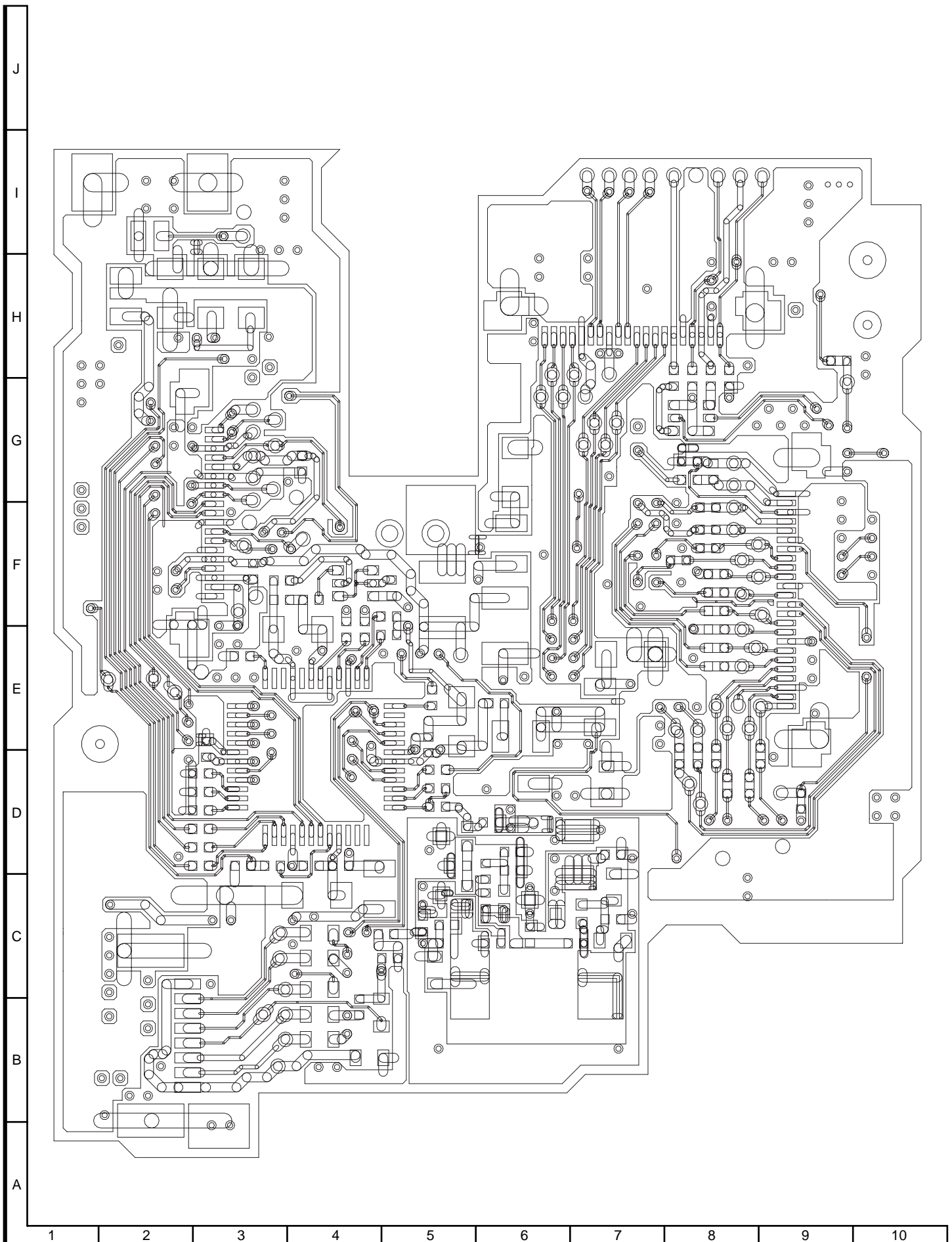
VCR PWB Wiring Side SIDE B



CAMERA PWB Component Side SIDE A

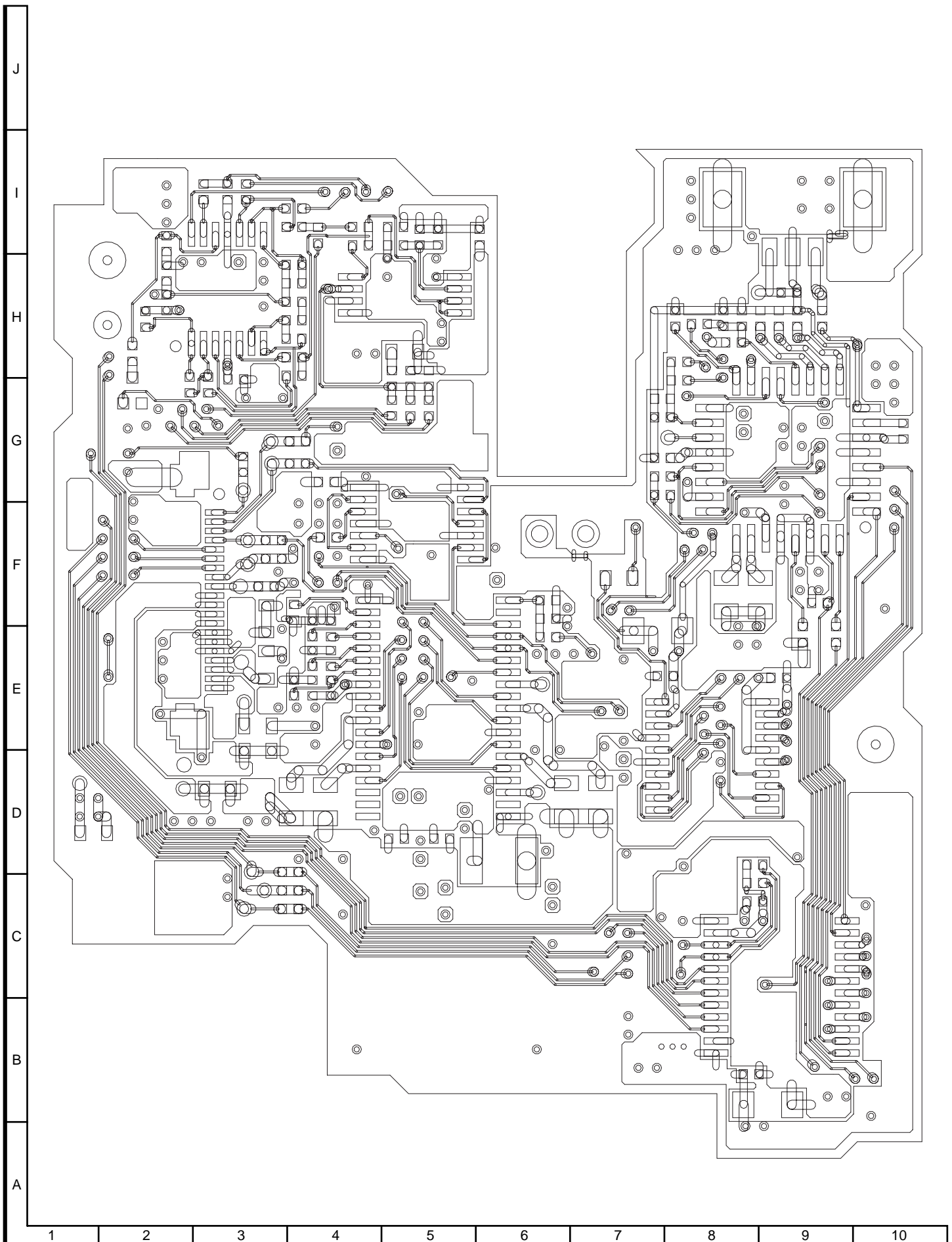


CAMERA PWB Wiring Side SIDE A



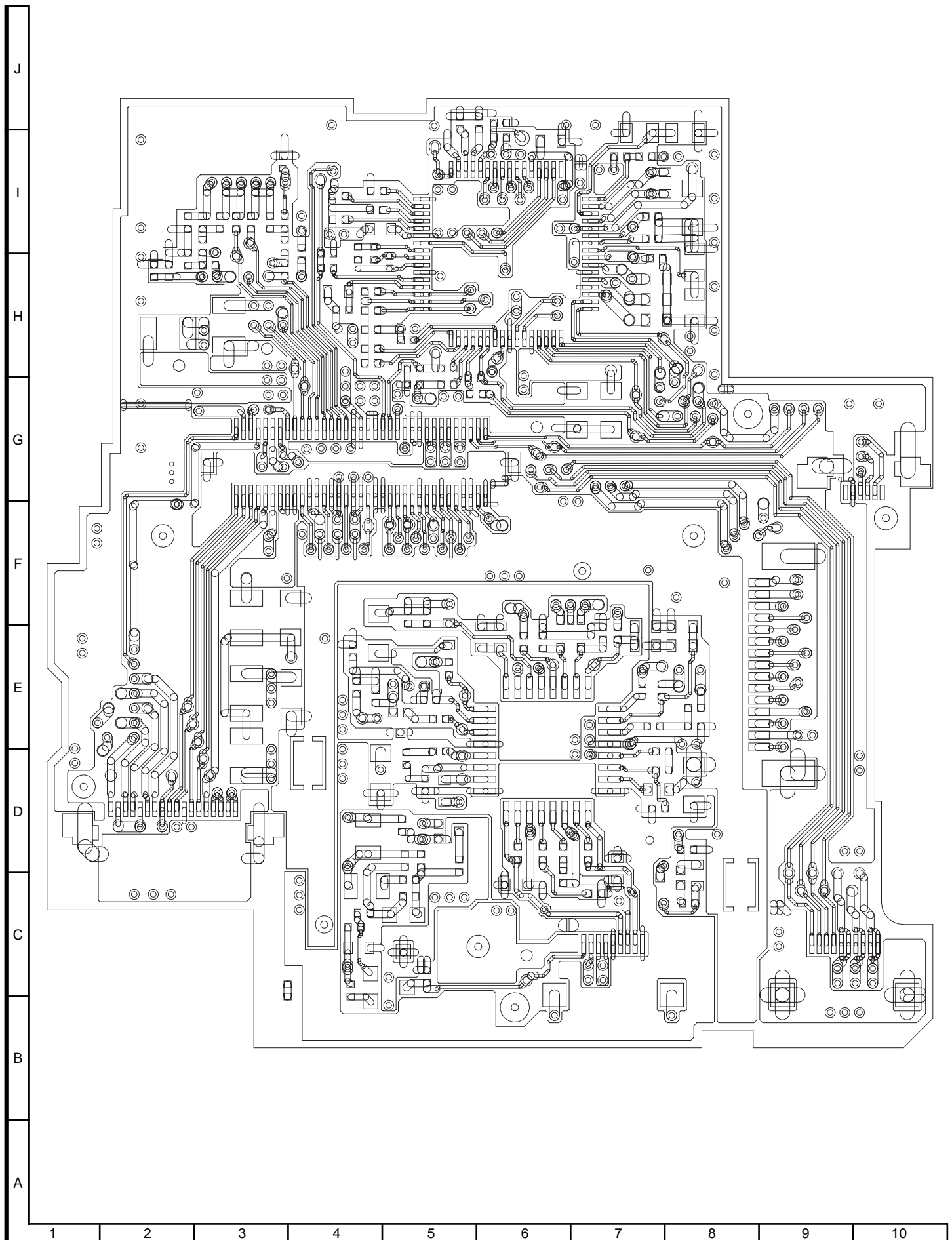


CAMERA PWB Wiring Side SIDE B

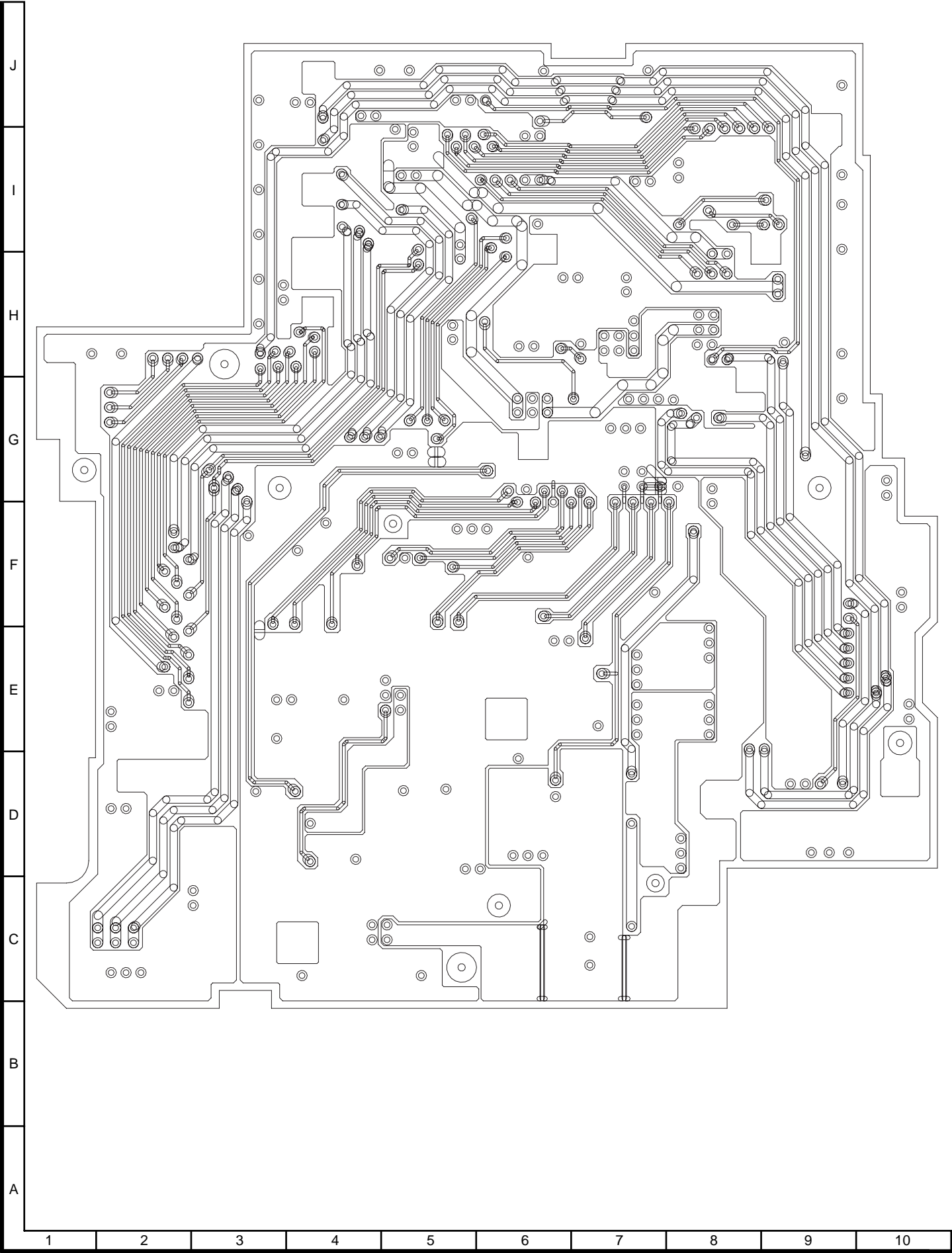




HEAD AMP PWB Wiring Side SIDE A



HEAD AMP PWB Wiring Side SIDE B



11.REPLACEMENT PARTS LIST/ EXPLODED VIEWS

ELECTRICAL PARTS LIST

Parts marked with "△" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

Les pièces marquées "△" sont importantes pour maintenir la sécurité de l'appareil. Ne remplacer ces pièces que par des pièces dont le numéro est spécifié pour maintenir la sécurité et protéger le bon fonctionnement de l'appareil.

" HOW TO ORDER REPLACEMENT PARTS "

in USA: Contact your nearest SHARP Parts Distributor. For location of SHARP Parts Distributor, Call Toll-free 1-IBE800-SHARP

in CANADA: Contact SHARP Electronics of Canada Limited Phone (416) 890-2100.

★MARK : SPARE PARTS-DELIVERY SECTION:ALL JAPAN

To have your order filled promptly and correctly, please furnish the following informations.

- | | |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO. |
| 3. PART NO. | 4. DESCRIPTION |
| 5. PRICE CODE | |

△ MARK: SAFETY RELATED PARTS
△ PIECES: RELATIVES A LA SECURITE

PWB ASSEMBLY IS NOT REPLACEMENT ITEM
L'ASSEMBLAGE P.C.I. EST UN ARTICLE NON REMPLACABLE

Ref. No.	Part No.	★	Description	Code
----------	----------	---	-------------	------

PRINTED WIRING BOARD ASSEMBLIES (NOT REPLACEMENT ITEM)

DUNTK2949QA00	VCR Unit (VL-AH30U/UC)	—
DUNTK2949QA03	VCR Unit (VL-A10U/UC/UA/UW)	—
DUNTK2949QA05	VCR Unit(VL-A10T)	—
DUNTK2949QA06	VCR Unit(VL-AH30T)	—
DUNTK2949QA12	VCR Unit(VL-A10K)	—
DUNTK2934QA00	CAMERA Unit	—
DUNTK2936QA00	HEAD AMP Unit	—
DUNTK2800PM03	CCD Unit	—

TUNER AND ASSEMBLY UNITS

RUNTK0352TAZZ	AV Jack Unit	AS
RUNTK0353TAZZ	VCR Operation Unit (VL-A10U/UC/UA/UW/K/AH30U/UC)	AS
RUNTK0369TAZZ	VCR Operation Unit (VL-A10T/AH30T)	
RUNTK0354TAZZ	Lithium Battery Unit	AF
RUNTK0356TAZZ	6-cell Detection Unit	

Ref. No.	Part No.	★	Description	Code
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DUNTK2949QA00(VL-AH30U/UC)
DUNTK2949QA03(VL-A10U/UC/UA/UW)
DUNTK2949QA05(VL-A10T)
DUNTK2949QA06(VL-AH30T)
DUNTK2949QA12(VL-A10K)
VCR UNIT

INTEGRATED CIRCUITS

IC151	VHiCXD2310A-1		CXD2310A, A/D Converter	AV
* IC401	RH-iX0769TAZZ		IX0769TA, Integrated DSP	BL
	or			
	RH-iX0788TAZZ		IX0788TA, Integrated DSP	BB
IC601	VHiLA7458W/-1		LA7458W, Sig Process	AT
IC701	VHiS81330HG-1		S81330HG, 3V REG	AF
IC702	VHiRN5VD25A-1		RN5VD25A, 2.5V DET	AE
IC704	VHiRS5C313/-1		RS5C313, Clock	AL
IC705	VHiM24C08W6-1		M24C08W6, E ² PROM	AH
IC706	RH-iX0756TAZZ		IX0756TA, System/Servo Control(A10T/AH30T)	
IC706	RH-iX0759TAZZ		IX0759TA, System/Servo Control(A10U/UC/UA/UW/AH30U/UC)	BC
IC707	RH-iX0766TAZZ		IX0766TA, OSD.IC (A10T/AH30T)	
IC707	RH-iX0768TAZZ		IX0768TA, OSD.IC (A10U/UC/UA/UW/AH30U/UC)	AP
IC708	VHiTA75S01F-1		TA75S01F, Amp	AD
IC710	VHiTC4W53U/-1		TC4W53U	AF
IC711	VHiTC4W53U/-1		TC4W53U	AF
IC712	VHiTC7W74U/-1		TC7W74U	AD
IC800	VHiMM1323XV-1		MM1323XV, LCD Interface	AN
IC900	VHiMB3881/-1		MB3881, Power Control IC	AT
IC902	VHiBU4051FV-1		BU4051FV, Multiplexer	AF
IC903	VHiNJM2904M-1		NJM2904M, 3.1V/2.5V Error Amp	AE
IC904	VHiTA75S01F-1		TA75S01F, Amp	AD
IC1451	VHiTK15440M-1		TK15440M, Driver	AF
IC2701	VHiMB88344F-1		MB88344F, D/A Converter	AV
IC2901	VHiMM1332GF-1		MM1332GF, Charge Control	AH
IC2902	VHiNJU7012F-1		NJU7012F, Over Current Detector	AE
IC3800	VHiNJM2107F-1		NJM2107F, AFC LPF	AE
IC3801	VHiLZ9GH16/-1		LZ9GH16, LCD Controller	AP

TRANSISTORS

Q403	VS2SA1873Y/-1	2SA1873Y	AC
Q406	VS2SA1989R/-1	2SA1989R	AB
Q407	VS2SA1989R/-1	2SA1989R	AB
Q409	VSHN1B04FU/-1	HN1B04FU	AC
Q410	VS2SA1989R/-1	2SA1989R	AB
Q601	VS2SA1362GR-1	2SA1362GR	AC
Q602	VSRT1N441U/-1	RT1N441U	AB
Q603	VS2SC5383F/-1	2SC5383F	AB
Q704	VSHN1B04FU/-1	HN1B04FU	AC
Q705	VSHN2C01FU/-1	HN2C01FU	AC
Q707	VSHN1C01FU/-1	HN1C01FU	AC
Q708	VSRTN2904///-1	RN2904	AC
Q709	VSHN1C01FU/-1	HN1C01FU	AC
Q901	VS2SA2010/-1	2SA2010	AD
Q903	VS2SA1989R/-1	2SA1989R	AB
Q904	VS2SA1362GR-1	2SA1362GR	AC
Q905	VS2SA1989R/-1	2SA1989R	AB
Q906	VS2SA2010/-1	2SA2010	AD
Q908	VS2SA1362GR-1	2SA1362GR	AC
Q911	VSCPH3215/-1	CPH3215	AD
Q912	VS2SA1989R/-1	2SA1989R	AB
Q913	VSRT1N441U/-1	RT1N441U	AB
Q913	VS2SC5383F/-1	2SC5383F(A10T)	AB
Q914	VSRT1N441U/-1	RT1N441U	AB
Q916	VSRTN4983///-1	RN4983	AC
Q917	VSRTN4983///-1	RN4983	AC
Q918	VSRTN4983///-1	RN4983	AC
Q919	VSCPH6702/-1	CPH6702	AD
Q921	VSCPH6702/-1	CPH6702	AD
Q922	VSCPH6702/-1	CPH6702	AD

* IC401 varies according to L918. (Be sure to make IC401 and L918 a pairing.)

IC401	L918
RH-IX0769TAZZ ⇔	RC-iLP0271TAZZ
RH-IX0788TAZZ ⇔	RC-iLP0287TAZZ

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
L931	RCiLP0343TAZZ		Coil, 10μH	AD	C446	VCKYCZ1CB103K	0.01	16V Ceramic	AB
L1401	VPD9M2R7J1R0N		Peaking, 2.7μH	AC	C447	VCKYCZ1AB104K	0.1	10V Ceramic	AB
L1402	VPD9M1R0JR57N		Peaking, 1μH	AB	C448	VCSATA0JJ106M	10	6.3V Tantalum	AD
L1451	VPD9M220K2R0N		Peaking, 22μH	AC	C449	VCKYCZ1CB103K	0.01	16V Ceramic	AB
L1452	VPD9M100KR86N		Peaking, 10μH	AC	C455	VCKYCZ1CB103K	0.01	16V Ceramic	AB
L1453	VPD9M120J1R9N		Peaking, 12μH	AB	C456	VCKYCZ1CB103K	0.01	16V Ceramic	AB
L3801	VPD9M220J2R7N		Peaking, 22μH	AC	C457	VCKYCZ1CB103K	0.01	16V Ceramic	AB
L3802	VPD9M100J1R7N		Peaking, 10μH	AC	C458	VCKYCZ1CB103K	0.01	16V Ceramic	AB
L6401	VPD9M820J9R5N		Peaking, 82μH	AC	C460	VCKYCY0JB105K	1	6.3V Ceramic	AC
L6402	VPBBM331J260N		Peaking, 330μH	AB	C461	VCKYCZ1CB103K	0.01	16V Ceramic	AB
L6403	VPD9M680J8R6N		Peaking, 68μH	AC	C462	VCSATA1AJ106M	10	10V Tantalum	AC
L7401	VPD9M1R0JR57N		Peaking, 1μH	AB	C463	VCKYCZ1AB104K	0.1	10V Ceramic	AB
L7402	VPD9M180J2R4N		Peaking, 18μH	AC	C464	VCKYCZ1AB104K	0.1	10V Ceramic	AB
			(AH30U/UC/T)		C465	VCKYCZ1HB271K	270p	50V Ceramic	AC
L7403	VPD9M470J6R6N		Peaking, 47μH	AC	C466	VCKYCZ1AB104K	0.1	10V Ceramic	AB
L7404	VPBBM471J310N		Peaking, 470μH	AB	C467	VCKYCZ1AB104K	0.1	10V Ceramic	AB
L7405	VPD9M181J190N		Peaking, 180μH	AC	C469	VCKYCZ1CB103K	0.01	16V Ceramic	AB
L7406	VPBBM331J260N		Peaking, 330μH	AB	C471	VCKYCZ1CB103K	0.01	16V Ceramic	AB
L7407	VPD9M330J3R6N		Peaking, 33μH	AC	C472	VCKYCZ1CB103K	0.01	16V Ceramic	AB
			(AH30U/UC/T)		C473	VCCCCZ1HH151J	150p	50V Ceramic	AB
L7408	VPBBM331J260N		Peaking, 330μH	AB	C475	VCSATA0JJ106M	10	6.3V Tantalum	AD
L7452	VPD9M8R2J2R0N		Peaking, 8.2μH	AC	C601	VCSATA1CJ225M	2.2	16V Tantalum	AC
L7453	VPD9M8R2J2R0N		Peaking, 8.2μH	AC	C602	VCKYTV1CF225Z	2.2	16V Ceramic	AC
			(AH30U/UC/T)		C603	VCEAPF0JW476M	47	6.3V Electrolytic	AB
L8401	VPD9M1R8JR84N		Peaking, 1.8μH	AC	C604	VCSATE1AJ476M	47	10V Tantalum	AD
L8402	VPD9M2R2JR96N		Peaking, 2.2μH	AC	C605	VCKYCZ1CB103K	0.01	16V Ceramic	AB
			(A10U/UC/UA/UW/AH30U/UC/T)		C606	VCKYCZ1CB103K	0.01	16V Ceramic	AB
L8404	VPD9M221J210N		Peaking, 220μH	AB	C607	VCKYCZ1CB103K	0.01	16V Ceramic	AB
L8405	VP-1M391J330N		Peaking, 390μH	AB	C608	VCKYCZ1CB103K	0.01	16V Ceramic	AB
L8451	VPD9M820J9R5N		Peaking, 82μH	AC	C609	VCKYCY1CF334Z	0.33	16V Ceramic	AA
L8452	VPD9M221J210N		Peaking, 220μH	AB	C610	VCKYCZ1CB103K	0.01	16V Ceramic	AB
△ T901	RTRNZ0154TAZZ		Power Transformer	AF	C611	VCEAPF0JW226M	22	6.3V Electrolytic	AB
					C612	VCEAPH1HW474M	0.47	50V Electrolytic	AB
					C613	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C614	VCKYCZ1CB223K	0.022	16V Ceramic	AC
					C615	VCEAPH1HW105M	1	50V Electrolytic	AB
					C616	VCKYCZ1HB102K	1000p	50V Ceramic	AB
					C617	VCEAPF0JW336M	33	6.3V Electrolytic	AB
					C618	VCKYCY0JB105K	1	6.3V Ceramic	AC
					C619	VCSATA1DJ475M	4.7	20V Tantalum	AC
					C620	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C621	VCSATA1DJ475M	4.7	20V Tantalum	AC
					C622	VCSAPD1DJ474M	0.47	20V Tantalum	AD
					C623	VCSATA0JJ106M	10	6.3V Tantalum	AD
					C624	VCEAPF0JW476M	47	6.3V Electrolytic	AB
					C625	VCSATA1DJ475M	4.7	20V Tantalum	AC
					C626	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C627	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C628	VCKYCZ1EB682K	6800p	25V Ceramic	AB
					C629	VCKYCZ1HB332K	3300p	50V Ceramic	AA
					C630	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C631	VCSAPD1CJ105M	1	16V Tantalum	AC
					C632	VCKYCZ1HB222K	2200p	50V Ceramic	AB
					C633	VCKYCZ1AB104K	0.1	10V Ceramic	AB
					C634	VCKYCZ1AB104K	0.1	10V Ceramic	AB
					C635	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C636	VCSAPD1CJ105M	1	16V Tantalum	AC
					C637	VCSATE1AJ476M	47	10V Tantalum	AD
					C638	VCKYCZ1CB223K	0.022	16V Ceramic	AC
					C641	VCKYCZ1CB103K	0.01	16V Ceramic	AB
					C701	VCKYCZ1HB102K	1000p	50V Ceramic	AB
					C702	VCKYCZ1HB102K	1000p	50V Ceramic	AB
					C703	VCKYCZ1HB102K	1000p	50V Ceramic	AB
					C704	VCKYCZ1HB102K	1000p	50V Ceramic	AB
					C705	VCKYCZ1HB102K	1000p	50V Ceramic	AB
								(AH30U/UC/T)	
					C706	VCKYCZ1HB102K	1000p	50V Ceramic	AB
					C707	VCKYCZ1HB102K	1000p	50V Ceramic	AB
								(AH30U/UC/T)	
					C708	VCKYCZ1AB104K	0.1	10V Ceramic	AB
					C709	RC-KZ0052TAZZ	4.7	16V	AC
					C711	VCKYCY1AF105Z	1	10V Ceramic	AC
					C712	VCCCCZ1HH220J	22p	50V Ceramic	AB
					C713	VCCCCZ1HH180J	18p	50V Ceramic	AB
					C714	VCKYCZ1HF103Z	0.01	50V Ceramic	AB

CAPACITORS

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
C715	VCKYCZ1HB102K	1000p	50V Ceramic	AB	C1405	VCCCCZ1HH820J	82p	50V Ceramic	AB
C716	VCSATA1AJ106M	10	10V Tantalum	AC	C1406	VCCCCZ1HH330J	33p	50V Ceramic	AB
C717	VCKYCZ1AB104K	0.1	10V Ceramic	AB	C1407	VCCCCZ1HH151J	150p	50V Ceramic	AB
C718	VCKYCZ1AB104K	0.1	10V Ceramic	AB	C1408	VCCCCZ1HH151J	150p	50V Ceramic	AB
C720	VCKYCZ1AB104K	0.1	10V Ceramic	AB	C1415	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C721	VCCCCZ1HH330J	33p	50V Ceramic	AB	C1416	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C722	VCKYCZ1AB104K	0.1	10V Ceramic	AB	C1451	VCSATE1AJ476M	47	10V Tantalum	AD
C724	VCKYCZ1AB104K	0.1	10V Ceramic	AB	C1452	VCSATE1AJ476M	47	10V Tantalum	AD
C725	VCKYCZ1AB104K	0.1	10V Ceramic	AB	C1453	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C726	VCKYCZ1HB471K	470p	50V Ceramic	AB	C1454	VCSATA0YJ106M	10	7V Tantalum	AC
C727	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	C1456	VCCCCZ1HH100D	10p	50V Ceramic	AB
C728	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	C1458	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C729	VCKYCZ1AB104K	0.1	10V Ceramic	AB	C1459	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C730	VCKYCZ1AB104K	0.1	10V Ceramic	AB	C1801	VCKYTV1EB104K	0.1	25V Ceramic	AB
C731	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	C1803	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C732	VCSATA1AJ106M	10	10V Tantalum	AC	C1805	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
C733	VCKYCY1AF105Z	1	10V Ceramic	AC	C1806	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C737	VCKYCZ1AB104K	0.1	10V Ceramic	AB	C1808	VCKYTV1EB104K	0.1	25V Ceramic	AB
C738	VCKYCZ1AB104K	0.1	10V Ceramic	AB	C1809	VCKYCY0JB105K	1	6.3V Ceramic	AC
C750	VCKYCY0JB105K	1	6.3V Ceramic	AC	C1810	VCSATA1EJ105M	1	25V Tantalum	AC
C800	VCKYTQ1CB105K	1	16V Ceramic	AC	C1812	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C801	VCKYTV1CB105K	1	16V Ceramic	AC	C1813	VCSATA1VJ105M	1	35V Tantalum	AC
C803	VCKYCY0JB105K	1	6.3V Ceramic	AC	C1901	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C804	VCKYCY0JB105K	1	6.3V Ceramic	AC	C1902	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C805	VCKYCY0JB105K	1	6.3V Ceramic	AC	C1903	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C900	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C1904	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C901	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C1907	VCKYCZ1AB473K	0.047	10V Ceramic	AB
C902	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C1908	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C903	RC-KZ0055TAZZ	Capacitor		AD	C1909	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C904	RC-KZ0055TAZZ	Capacitor		AD	C1910	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C905	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C1911	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C906	RC-KZ0070TAZZ	Capacitor		AD	C1912	VCCCCZ1HH101J	100p	50V Ceramic	AB
C907	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C1913	VCKYCY1AB224K	0.22	10V Ceramic	AB
C909	VCKYCY0JB105K	1	6.3V Ceramic	AC	C1914	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C910	VCKYTV1AB105K	1	10V Ceramic	AD	C1915	VCKYCZ1EB472K	4700p	25V Ceramic	AB
C912	RC-KZ0055TAZZ	Capacitor		AD	C1916	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C915	VCKYCY0JB105K	1	6.3V Ceramic	AC	C1917	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C916	RC-KZ0054TAZZ	Capacitor		AD	C1918	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C917	RC-KZ0054TAZZ	Capacitor		AD	C1919	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C918	RC-KZ0055TAZZ	Capacitor		AD	C1920	VCKYCZ1HB152K	1500p	50V Ceramic	AB
C919	RC-KZ0084TAZZ	1	25V Ceramic	AC	C1921	VCKYCZ1HB222K	2200p	50V Ceramic	AB
C920	RC-KZ0055TAZZ	3.3	10V Ceramic	AD	C1922	VCKYCZ1HB561K	560p	50V Ceramic	AC
C921	RC-KZ0084TAZZ	1	25V Ceramic	AC	C1923	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C922	RC-KZ0084TAZZ	1	25V Ceramic	AC	C1924	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C923	VCKYTV1EB104K	0.1	25V Ceramic	AB	C1925	VCKYCZ1HB332K	3300p	50V Ceramic	AA
C924	VCKYTV1CF105Z	1	16V Ceramic	AB	C1926	VCKYCZ1HB152K	1500p	50V Ceramic	AB
C925	VCKYTV1CF105Z	1	16V Ceramic	AB	C1927	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C926	VCKYTV1CF105Z	1	16V Ceramic	AB	C1928	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C927	VCKYTV1EB104K	0.1	25V Ceramic	AB	C1929	VCKYCZ1HB561K	560p	50V Ceramic	AC
C930	VCKYCZ1AB104K	0.1	10V Ceramic	AB	C2401	VCCCCY1HH471J	470p	50V Ceramic	AA
C931	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C2402	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C932	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C2403	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C933	RC-KZ0055TAZZ	Capacitor		AD	C2404	VCKYCY1CB104K	0.1	16V Ceramic	AB
C934	RC-KZ0054TAZZ	2.2	16V Ceramic	AD	C2405	VCKYCY1CB104K	0.1	16V Ceramic	AB
C935	RC-KZ0053TAZZ	10	16V Ceramic	AD	C2406	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C936	RC-KZ0053TAZZ	4.7	16V Ceramic	AD	C2407	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C937	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C2408	VCCCCZ1HH820J	82p	50V Ceramic	AB
C938	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C2409	VCKYCY0JB105K	1	6.3V Ceramic	AC
C939	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C2701	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C940	RC-KZ0055TAZZ	Capacitor		AD	C2702	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C941	RC-KZ0055TAZZ	Capacitor		AD	C2703	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C942	RC-KZ0084TAZZ	1	25V Ceramic	AC	C2904	VCKYTV1AB105K	1	10V Ceramic	AD
C943	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C2906	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C944	VCKYCZ1CB103K	0.01	16V Ceramic	AB	C2907	VCKYCY1CB104K	0.1	16V Ceramic	AB
C945	VCKYCY1EF104Z	0.1	25V Ceramic	AA	C2908	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C946	RC-KZ0055TAZZ	Capacitor		AD	C2909	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C947	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C2910	VCKYCY1CB104K	0.1	16V Ceramic	AB
C948	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C2911	VCKYTV1AB105K	1	10V Ceramic	AD
C950	VCKYCZ1HB102K	1000p	50V Ceramic	AB	C3602	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C951	VCKYCZ1HB102K	1000p	50V Ceramic	AB	C3603	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C952	VCKYCZ1AB104K	0.1	10V Ceramic	AB	C3800	VCKYCZ1HB561K	560p	50V Ceramic	AC
C953	VCKYCZ1AB104K	0.1	10V Ceramic	AB	C3801	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C955	VCKYCZ1AB104K	0.1	10V Ceramic	AB	C3803	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C956	VCKYCZ1AB104K	0.1	10V Ceramic	AB	C3804	VCKYTV1CB105K	1	16V Ceramic	AC
C1401	VCCCCZ1HH390J	39p	50V Ceramic	AB	C3805	VCCCCZ1HH151J	150p	50V Ceramic	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
C3806	VCCCCZ1HH220J	22p	50V Ceramic	AB	R189	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C3807	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R190	VRS-CZ1JF220J	22	1/16W Metal Oxide	AA
C3808	VCCCCZ1HH560J	56p	50V Ceramic	AB	R191	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C3812	VCKYCY1CF224Z	0.22	16V Ceramic	AA	R194	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
C3813	VCCCCZ1HH101J	100p	50V Ceramic	AB	R195	VRS-CZ1JF133J	13k	1/16W Metal Oxide	AA
C3814	VCCCCZ1HH101J	100p	50V Ceramic	AB	R196	VRS-CZ1JF203J	20k	1/16W Metal Oxide	AA
C3815	VCKYCZ1AB104K	0.1	10V Ceramic	AB	R406	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C3817	VCKYCZ1AB104K	0.1	10V Ceramic	AB	R407	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA
C3818	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R408	VRS-CZ1JF272D	2.7k	1/16W Metal Oxide	AB
C3819	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R410	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA
C6402	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R412	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C6403	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R413	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA
C6404	VCCCCY1HH561J	560p	50V Ceramic	AB	R414	VRS-CZ1JF272D	2.7k	1/16W Metal Oxide	AB
C6406	VCCCCZ1HH121J	120p	50V Ceramic	AB	R416	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA
C6407	VCKYCZ1AB104K	0.1	10V Ceramic	AB	R417	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C6408	VCCCCZ1HH121J	120p	50V Ceramic	AB	R418	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA
C6409	VCCCCZ1HH220J	22p	50V Ceramic	AB	R420	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA
C6410	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R421	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
C6452	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R422	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
C7401	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R424	VRS-CZ1JF272D	2.7k	1/16W Metal Oxide	AB
C7402	VCCCCZ1HH150J	15p	50V Ceramic	AB	R425	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA
C7403	VCCCCZ1HH270J	27p	50V Ceramic	AB	R426	VRS-CZ1JF124J	120k	1/16W Metal Oxide	AA
C7404	VCCCCZ1HH820J	82p	50V Ceramic	AB	R432	VRS-CZ1JF393D	39k	1/16W Metal Oxide	AB
			(AH30U/UC/T)		R433	VRS-CZ1JF303D	30k	1/16W Metal Oxide	AA
C7405	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R434	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA
C7407	VCCCCZ1HH100D	10p	50V Ceramic	AB	R435	VRS-CZ1JF823D	82k	1/16W Metal Oxide	AB
C7408	VCKYCZ1HB332K	3300p	50V Ceramic	AA	R436	VRS-CZ1JF393D	39k	1/16W Metal Oxide	AB
C7409	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R437	VRS-CZ1JF303D	30k	1/16W Metal Oxide	AA
C7410	VCCCCY1HH271J	270p	50V Ceramic	AA	R439	VRS-CZ1JF823D	82k	1/16W Metal Oxide	AB
C7411	VCCCCZ1HH330J	33p	50V Ceramic	AB	R440	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
			(A10UC/UA/UW/T/AH30UC/T)		R444	VRS-CZ1JF393D	39k	1/16W Metal Oxide	AB
C7411	VCCCCZ1HH360J	36p	50V Ceramic	AA	R445	VRS-CZ1JF303D	30k	1/16W Metal Oxide	AA
			(A10U/AH30U)		R446	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C7412	VCCCCY1HH271J	270p	50V Ceramic	AA	R447	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB
			(AH30U/UC/T)		R451	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
C7413	VCKYCY0JB105K	1	6.3V Ceramic	AC	R452	VRS-CZ1JF823D	82k	1/16W Metal Oxide	AB
C7414	VCKYCZ1AB104K	0.1	10V Ceramic	AB	R454	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
C7415	VCCCCZ1HH360J	36p	50V Ceramic	AA	R455	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA
			(A10U/AH30U)		R456	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA
C7455	VCCCCZ1HH100D	10p	50V Ceramic	AB	R457	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
			(A10T)		R458	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB
C7455	VCCCCZ1HH150J	15p	50V Ceramic	AB	R459	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
			(AH30U/UC/T)		R460	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
C7455	VCCCCZ1HH470J	47p	50V Ceramic	AB	R461	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA
			(A10U/UC/UA/UW/T)		R462	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
C7456	VCCCCZ1HH330J	33p	50V Ceramic	AB	R463	VRS-CZ1JF822J	8.2k	1/16W Metal Oxide	AA
			(AH30U/UC/T)		R464	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
C7459	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R488	VRS-CY1JF000J	0	1/16W Metal Oxide	AA
C7460	VCKYCZ1HB471K	470p	50V Ceramic	AB	R489	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C7462	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R496	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C7463	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R498	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
C8401	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R601	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C8403	VCCCCZ1HH330J	33p	50V Ceramic	AB	R602	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA
C8404	VCCCCZ1HH180J	18p	50V Ceramic	AB	R603	VRS-CZ1JF154J	150k	1/16W Metal Oxide	AA
C8405	VCCCCZ1HH390J	39p	50V Ceramic	AB	R604	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
C8408	VCCCCZ1HH470J	47p	50V Ceramic	AB	R605	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
C8409	VCCCCZ1HH221J	220p	50V Ceramic	AB	R606	VRS-CZ1JF334J	330k	1/16W Metal Oxide	AA
C8410	VCCCCZ1HH330J	33p	50V Ceramic	AB	R607	VRS-CZ1JF334J	330k	1/16W Metal Oxide	AA
C8411	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R609	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
C8412	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R612	VRS-CZ1JF681J	680	1/16W Metal Oxide	AA
C8413	VCCCCZ1HH470J	47p	50V Ceramic	AB	R614	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
C8414	VCKYCY0JB105K	1	6.3V Ceramic	AC	R615	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA
C8451	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R616	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
C8452	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R617	VRS-CZ1JF335J	3.3M	1/16W Metal Oxide	AA
C8453	VCCCCZ1HH560J	56p	50V Ceramic	AB	R618	VRS-CZ1JF154J	150k	1/16W Metal Oxide	AA
C8454	VCCCCZ1HH220J	22p	50V Ceramic	AB	R619	VRS-CZ1JF274J	270k	1/16W Metal Oxide	AA
C8455	VCCCCZ1HH680J	68p	50V Ceramic	AB	R624	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA
C8456	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R625	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C8457	VCKYCZ1HB681K	680p	50V Ceramic	AB	R626	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
C8458	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R627	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C8461	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R628	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
					R629	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
					R632	VRS-CZ1JF822J	8.2k	1/16W Metal Oxide	AA
R152	VRS-CY1JF000J	0	1/16W Metal Oxide	AA	R633	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA
R185	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R702	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA

RESISTORS

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R703	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R788	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R704	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R789	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R705	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R790	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R707	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R791	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R708	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R792	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R709	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R793	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R710	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R794	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R711	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R795	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
R712	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R797	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R713	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R798	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R714	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R799	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R715	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R801	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
R716	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R802	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
R717	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA	R803	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
R718	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA	R902	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R719	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA	R903	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
R720	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R904	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA
R722	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA	R905	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
R723	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R907	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
R724	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R908	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
R725	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R911	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R726	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R912	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R727	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R913	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA
R728	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R914	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R729	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R915	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
R730	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R916	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R731	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R917	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
			(AH30U/UC/T)		R918	VRS-CZ1JF753J	75k	1/16W Metal Oxide	AA
R732	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R919	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
			(AH30U/UC/T)		R920	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R733	VRS-CZ1JF822J	8.2k	1/16W Metal Oxide	AA	R921	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R734	VRS-CZ1JF822J	8.2k	1/16W Metal Oxide	AA	R922	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R735	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R923	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
R737	VRS-CZ1JF334J	330k	1/16W Metal Oxide	AA	R924	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA
R738	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R925	VRS-CZ1JF753J	75k	1/16W Metal Oxide	AA
R740	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	R926	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA
R741	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R928	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
R742	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R929	VRS-CZ1JF681J	680	1/16W Metal Oxide	AA
R743	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA	R930	VRS-CZ1JF102D	1k	1/16W Metal Oxide	AA
R744	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R931	VRS-CY1JFR22J	0.22	1/16W Metal Oxide	AA
R745	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA	R933	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA
R746	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA	R934	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R747	VRS-CZ1JF563D	56k	1/16W Metal Oxide	AA	R935	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R748	VRS-CZ1JF154J	150k	1/16W Metal Oxide	AA	R936	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R749	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R937	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R750	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R938	VRS-CZ1JF822J	8.2k	1/16W Metal Oxide	AA
R751	VRS-CZ1JF184J	180k	1/16W Metal Oxide	AA	R939	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R753	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA	R940	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R755	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R941	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R756	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R942	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R757	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R943	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R758	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R944	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R759	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	R945	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R760	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	R946	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R761	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R947	VRS-CZ1JF123D	12k	1/16W Metal Oxide	AA
R762	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R949	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R763	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R951	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R765	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R1403	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R766	VRS-CZ1JF181J	180	1/16W Metal Oxide	AA	R1404	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
R767	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA	R1407	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R768	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R1408	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R769	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	R1409	VRS-CZ1JF121J	120	1/16W Metal Oxide	AA
R772	VRS-CZ1JF153D	15k	1/16W Metal Oxide	AB	R1410	VRS-CZ1JF820J	82	1/16W Metal Oxide	AA
R773	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB	R1411	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R774	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R1412	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R775	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R1413	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R776	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R1414	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R777	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	R1416	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R778	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	R1425	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R779	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R1426	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R780	VRS-CZ1JF330J	33	1/16W Metal Oxide	AA	R1452	VRS-CZ1JF750D	75	1/16W Metal Oxide	AA
R781	VRS-CZ1JF330J	33	1/16W Metal Oxide	AA	R1453	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R785	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R1454	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R786	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R1455	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R787	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R1456	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R1458	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R1961	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R1459	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R1962	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R1802	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R1963	VRS-CZ1JF331J	330	1/16W Metal Oxide	AA
R1803	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R1965	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R1805	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R1966	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA
R1806	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA	R1967	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA
R1807	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	R1968	VRS-CZ1JF121J	120	1/16W Metal Oxide	AA
R1808	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA	R1970	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R1809	VRS-CZ1JF334J	330k	1/16W Metal Oxide	AA	R1972	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R1810	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA	R1973	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1812	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R1974	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA
R1813	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	R1975	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA
R1814	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA	R1976	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R1815	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	R1980	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA
R1816	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA	R1981	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA
R1817	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA	R1982	VRS-CZ1JF121J	120	1/16W Metal Oxide	AA
R1818	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	R2401	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R1819	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA	R2402	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA
R1820	VRS-CZ1JF512J	5.1k	1/16W Metal Oxide	AB	R2403	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R1821	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R2404	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R1901	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R2405	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R1902	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA	R2406	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R1903	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	R2407	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA
R1905	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	R2408	VRS-CZ1JF822J	8.2k	1/16W Metal Oxide	AA
R1906	VRS-CZ1JF124J	120k	1/16W Metal Oxide	AA	R2409	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R1907	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA	R2410	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R1908	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R2411	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA
R1909	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R2412	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R1910	VRS-CZ1JF363J	36k	1/16W Metal Oxide	AA	R2413	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R1911	VRS-CZ1JF563J	56k	1/16W Metal Oxide	AA	R2414	VRS-CZ1JF183D	18k	1/16W Metal Oxide	AB
R1912	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA	R2415	VRS-CZ1JF561D	560	1/16W Metal Oxide	AA
R1913	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	R2416	VRS-CZ1JF561D	560	1/16W Metal Oxide	AA
R1914	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R2417	VRS-CZ1JF183D	18k	1/16W Metal Oxide	AB
R1915	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	R2418	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R1916	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	R2419	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R1917	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R2420	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R1919	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R2421	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R1920	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R2423	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R1921	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA	R2901	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
R1922	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA	R2902	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R1923	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA	R2903	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
R1924	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA	R2905	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R1925	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	R2908	VRS-CZ1JF681J	680	1/16W Metal Oxide	AA
R1926	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	R2911	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA
R1927	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R2913	VRS-TV1JD3R3J	3.3	1/16W Metal Oxide	AA
R1929	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	R2914	VRS-CZ1JF334D	330k	1/16W Metal Oxide	AA
R1930	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	R2915	VRS-TQ2BD471J	470	1/8W Metal Oxide	AA
R1931	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	R2921	VRS-CZ1JF184D	180k	1/16W Metal Oxide	AB
R1932	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA	R2922	VRS-CZ1JF184D	180k	1/16W Metal Oxide	AB
R1933	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA	R2923	VRS-CZ1JF823D	82k	1/16W Metal Oxide	AB
R1934	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R2925	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
R1935	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	R2932	VRS-TV2BDR12J	0.12	1/8W Metal Oxide	AB
R1936	VRS-CZ1JF243J	24k	1/16W Metal Oxide	AA	R2933	VRS-TV2BDR12J	0.12	1/8W Metal Oxide	AB
R1937	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA	R2934	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA
R1938	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R2935	VRS-CZ1JF334J	330k	1/16W Metal Oxide	AA
R1939	VRS-CZ1JF363J	36k	1/16W Metal Oxide	AA	R2936	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R1940	VRS-CZ1JF563J	56k	1/16W Metal Oxide	AA	R2937	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R1941	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA	R2938	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R1942	VRS-CZ1JF333D	33k	1/16W Metal Oxide	AB	R2939	VRS-CZ1JF472D	4.7k	1/16W Metal Oxide	AB
R1943	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	R2940	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
R1944	VRS-CZ1JF333D	33k	1/16W Metal Oxide	AB	R2941	VRS-CZ1JF222D	2.2k	1/16W Metal Oxide	AA
R1945	VRS-CZ1JF563D	56k	1/16W Metal Oxide	AA	R2942	VRS-CZ1JF123D	12k	1/16W Metal Oxide	AA
R1946	VRS-CZ1JF203D	20k	1/16W Metal Oxide	AA	R2943	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R1947	VRS-CZ1JF333D	33k	1/16W Metal Oxide	AB	R2944	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R1948	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	R2945	VRS-TV2BDR12J	0.12	1/8W Metal Oxide	AB
R1949	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	R2946	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R1950	VRS-CZ1JF563J	56k	1/16W Metal Oxide	AA	R2947	VRS-CZ1JF473D	47k	1/16W Metal Oxide	AB
R1951	VRS-CZ1JF123D	12k	1/16W Metal Oxide	AA	R2948	VRS-CZ1JF222D	2.2k	1/16W Metal Oxide	AA
R1952	VRS-CZ1JF562D	5.6k	1/16W Metal Oxide	AB	R2949	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R1953	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	R2950	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
R1955	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R2951	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
R1956	VRS-CZ1JF473D	47k	1/16W Metal Oxide	AB	R3602	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R1957	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	R3603	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R1959	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	R3604	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R1960	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R3800	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R3801	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	R7405	VRS-CZ1JF151J	150	1/16W Metal Oxide	AA
R3802	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	R7406	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R3803	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	R7407	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R3804	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA	R7408	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R3805	VRS-CZ1JF272D	2.7k	1/16W Metal Oxide	AB	R7409	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R3806	VRS-CZ1JF562D	5.6k	1/16W Metal Oxide	AB				(AH30U/UC/T)	
R3807	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	R7409	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R3808	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA				(A10U/UC/UA/UW/T)	
R3809	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA	R7410	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R3810	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R7411	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R3812	VRS-CZ1JF564J	560k	1/16W Metal Oxide	AA	R7412	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R3816	VRS-CZ1JF564J	560k	1/16W Metal Oxide	AA				(AH30U/UC/T)	
R3817	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	R7413	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R3818	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	R7414	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA
R3819	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R7415	VRS-CZ1JF681J	680	1/16W Metal Oxide	AA
R3820	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA	R7416	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R3822	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	R7417	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA
R3823	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	R7419	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R3824	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA				(AH30U/UC/T)	
R3826	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	R7420	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R3828	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA				(A10U/UC/UA/UW/T)	
R3829	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R7421	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA
R3830	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA				(AH30U/UC/T)	
R3831	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	R7421	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R3832	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA				(A10U/UC/UA/UW/T)	
R3833	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	R7422	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA
R3834	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA				(AH30U/UC/T)	
R3835	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	R7422	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
R3836	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA				(A10U/UC/UA/UW/T)	
R3837	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	R7423	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R3838	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R7424	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R3839	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA	R7426	VRS-CZ1JF271J	270	1/16W Metal Oxide	AA
R3840	VRS-CZ1JF303D	30k	1/16W Metal Oxide	AA	R7451	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R3841	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA	R7454	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R3842	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	R7455	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R3843	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R7456	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R3844	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R7459	VRS-CZ1JF391J	390	1/16W Metal Oxide	AA
R3845	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA	R7460	VRS-CZ1JF271J	270	1/16W Metal Oxide	AA
R3846	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA	R7461	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R3848	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA				(AH30U/UC/T)	
R3850	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R7461	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R3853	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA				(A10U/UC/UA/UW/T)	
R3854	VRS-CZ1JF183D	18k	1/16W Metal Oxide	AB	R7462	VRS-CZ1JF681J	680	1/16W Metal Oxide	AA
R4400	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R7463	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA
R4401	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R7464	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R4703	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R7466	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
			(A10U/UC/UA/UW/T)		R7467	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R4704	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R7468	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
			(A10U/UC/UA/UW/T)		R7469	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
R4705	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R7470	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
R6401	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	R7471	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R6402	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA	R8401	VRS-CZ1JF181J	180	1/16W Metal Oxide	AA
R6403	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA	R8402	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R6404	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA	R8403	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R6407	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA	R8404	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R6408	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	R8407	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R6409	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	R8412	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R6410	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	R8413	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R6411	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	R8416	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA
R6413	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA	R8417	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA
R6414	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	R8418	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R6415	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R8419	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R6416	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R8421	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R6417	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA	R8422	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R6418	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA	R8451	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R6419	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	R8452	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R6452	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA	R8453	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R6456	VRS-CZ1JF243J	24k	1/16W Metal Oxide	AA	R8454	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
R6457	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	R8455	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R6459	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R8456	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA
R6460	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R8457	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R7401	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	R8458	VRS-CZ1JF681D	680	1/16W Metal Oxide	AB
R7402	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	R8459	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
R7403	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R8460	VRS-CZ1JF102D	1k	1/16W Metal Oxide	AA
R7404	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R8461	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R8462	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA	C12	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
R8463	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	C13	VCKYCY1HB103K	0.01	50V Ceramic	AA
R8464	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	C14	VCSATA1DJ475M	4.7	20V Tantalum	AC
R8467	VRS-CZ1JF331D	330	1/16W Metal Oxide	AA	C15	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
R9410	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	C16	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
R9919	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	C17	VCSATE1VJ335M	3.3	35V Tantalum	AD
R9921	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	C18	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
MISCELLANEOUS PARTS					C20	VCSATA1AJ106M	10	10V Tantalum	AC
	PSLDM3238TAFW	Shield		AC	C21	VCKY CZ1AF104Z	0.1	10V Ceramic	AB
	PSLDM3239TAFW	Shield		AC	C22	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
	PSLDM3344TAFW	Shield			C23	VCSATA1AJ106M	10	10V Tantalum	AC
	PZETV0412TAZZ	Insulator		AD	C24	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
CN701	QPLGN0263TAZZ	Plug, 2Pin		AB	C25	VCKY CZ1HB102K	1000p	50V Ceramic	AB
CN702	QPLGN0264TAZZ	Plug, 2Pin		AC	C26	VCSATA1AJ106M	10	10V Tantalum	AC
CN703	QSOCN0860TAZZ	Socket, 8Pin		AE	C27	VCKY CZ1CB103K	0.01	16V Ceramic	AB
CN3601	QSOCN1207REN1	Socket, 12Pin		AD	C28	VCCCCY1HH270G	27p	50V Ceramic	
CN3800	QSOCN2471TAZZ	Socket, 24Pin		AE	C29	VCSATE1VJ335M	3.3	35V Tantalum	AD
CN7401	QCNCM7068TAZZ	Connector, 70Pin		AG	C30	VCKY CZ1HB102K	1000p	50V Ceramic	AB
CN9401	QSOCN1860TAZZ	Socket, 18Pin		AE	C33	VCCCCY1HH360G	36p	50V Ceramic	
⚠ CP901	QFS-L2526TAZZ	Fuse, 2.5A 16V		AC	C34	VCCCCY1HH180G	18p	50V Ceramic	
⚠ CP902	QFS-L2526TAZZ	Fuse, 2.5A 16V		AC	C35	VCKY CZ1CB103K	0.01	16V Ceramic	AB
⚠ CP903	QFS-L2526TAZZ	Fuse, 2.5A 16V		AC	C36	VCKY CZ1CB103K	0.01	16V Ceramic	AB
FB151	RBLN-0107TAZZ	Balun, BLN-0107TA		AB	C37	VCSATA1AJ106M	10	10V Tantalum	AC
FB152	RBLN-0107TAZZ	Balun, BLN-0107TA		AB	C38	VCKYCY0JB105K	1	6.3V Ceramic	AC
FB3800	RBLN-0028TAZZ	Balun, BLN-0028TA		AB	C101	VCKYTV1AB105K	1	10V Ceramic	AD
P601	QPLGN0263TAZZ	Plug, 2Pin		AB	C102	VCKYTV1AB105K	1	10V Ceramic	AD
P902	QPLGN0364TAZZ	Plug, 3Pin		AC	C103	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
P2901	QPLGN0664TAZZ	Plug, 6Pin		AD	C104	VCKY CZ1AF104Z	0.1	10V Ceramic	AB
P2902	QPLGN0764TAZZ	Plug, 7Pin		AD	C105	VCKY CZ1EF223Z	0.022	25V Ceramic	AB
SC151	QSOCN2071TAZZ	Socket, 20Pin		AD	C106	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
SC152	QSOCN2471TAZZ	Socket, 24Pin		AE	C107	VCKY CZ1AF104Z	0.1	10V Ceramic	AB
SC901	QSOCN0772TAZZ	Socket, 7Pin		AC	C108	VCSATA1AJ106M	10	10V Tantalum	AC
DUNTK2934QA00 CAMERA UNIT					C109	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
INTEGRATED CIRCUITS					C110	VCKY CZ1AF104Z	0.1	10V Ceramic	AB
IC11	VHiUPD16510-1	UPD16510, V-Driver		AR	C111	VCSATA1AJ106M	10	10V Tantalum	AC
IC12	VHiLR38590/-1	LR38590, Timing Generator		AR	C112	VCKY CZ1AF104Z	0.1	10V Ceramic	AB
IC101	VHiCXA2006Q-1	CXA2006Q, CDS/AGC		AV	C113	VCSATA1AJ106M	10	10V Tantalum	AC
IC102	VHiMB88146A-1	MB88146A, D/A Converter		AH	C114	VCKY CZ1AF104Z	0.1	10V Ceramic	AB
IC551	VHiUPD16835-1	UPD16835		AM	C115	VCSATA1AJ106M	10	10V Tantalum	AC
IC552	VHiNJM2902V-1	NJM2902V, OP-Amp		AD	C116	VCKY CZ1AF104Z	0.1	10V Ceramic	AB
IC553	VHiNJM3414V-1	NJM3414V, OP-Amp		AF	C117	VCCCCZ1HH150J	15p	50V Ceramic	AB
IC554	VHiTVHC74T/-1	TVHC74T		AF	C118	VCKY CZ1AB104K	0.1	10V Ceramic	AB
TRANSISTORS					C119	VCKY CZ1HB471K	470p	50V Ceramic	AB
Q11	VSHN2C01FU/-1	N2C01FU		AC	C120	VCKY CZ1AF104Z	0.1	10V Ceramic	AB
Q12	VS2SA1989R/-1	2SA1989R		AB	C551	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
Q13	VS2SC5383F/-1	2SC5383F		AB	C552	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
Q14	VS2SC5383F/-1	2SC5383F		AB	C553	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
Q15	VS2SA1989R/-1	2SA1989R		AB	C554	VCCCCZ1HH330J	33p	50V Ceramic	AB
Q551	VSRN1902///-1	RN1902		AC	C555	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
DIODE					C556	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
D551	VHDMA132K// -1	DMA132K		AA	C558	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
PACKAGED CIRCUIT					C559	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
X11	RCRSC0172TAZZ	Crystal, CRSC0172TA			C560	VCSATE1CJ156M	15	16V Tantalum	AD
TRANSFORMERS					C561	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
L11	VPBWM100KR50N	Peaking, 10μH		AC	C562	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
L12	VPBWM470K2R6N	Peaking, 47μH		AC	C563	VCSATA1AJ106M	10	10V Tantalum	AC
L13	VPD9M470J6R6N	Peaking, 47μH		AC	C565	VCSATA1AJ106M	10	10V Tantalum	AC
L101	VPBWM100KR50N	Peaking, 10μH		AC	C566	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
L551	VPBWM220K1R2N	Peaking, 22μH		AC	C567	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
L553	VPBWM100KR50N	Peaking, 10μH		AC	C568	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
CAPACITORS					C569	VCKY CZ1AF104Z	0.1	10V Ceramic	AB
C11	VCKY CZ1HF103Z	0.01 50V Ceramic		AB	C570	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
RESISTORS					C571	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
R11	VRS-CZ1JF000J	0 1/16W Metal Oxide		AA	C572	VCCCCZ1HH151J	150p	50V Ceramic	AB
R14	VRS-CZ1JF000J	0 1/16W Metal Oxide		AA	C573	VCKYCY1AF105Z	1	10V Ceramic	AC
R15	VRS-CZ1JF000J	0 1/16W Metal Oxide		AA	C574	VCKY CZ1HF103Z	0.01	50V Ceramic	AB
R17	VRS-CZ1JF102J	1k 1/16W Metal Oxide		AA					
R18	VRS-CZ1JF102J	1k 1/16W Metal Oxide		AA					
R19	VRS-CZ1JF222J	2.2k 1/16W Metal Oxide		AA					
R20	VRS-CZ1JF822J	8.2k 1/16W Metal Oxide		AA					

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R21	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	FB102	RBLN-0056TAZZ		Balun, BLN-0056TA	AC
R22	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	FB103	RBLN-0056TAZZ		Balun, BLN-0056TA	AC
R23	VRS-CZ1JF330J	33	1/16W Metal Oxide	AA	FB104	RBLN-0056TAZZ		Balun, BLN-0056TA	AC
R25	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	FB105	RBLN-0056TAZZ		Balun, BLN-0056TA	AC
R27	VRS-CZ1JF820J	82	1/16W Metal Oxide	AA	FB106	RBLN-0056TAZZ		Balun, BLN-0056TA	AC
R28	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	FB107	RBLN-0056TAZZ		Balun, BLN-0056TA	AC
R29	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	FB109	RBLN-0107TAZZ		Balun, BLN-0107TA	AB
R30	VRS-CZ1JF820J	82	1/16W Metal Oxide	AA	FB110	RBLN-0107TAZZ		Balun, BLN-0107TA	AB
R31	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	P101	QPLGN0258REZZ		Plug, 2Pin	AD
R33	VRS-CZ1JF102D	1k	1/16W Metal Oxide	AA	SC11	QSOCN1972TAZZ		Socket, 19Pin	AD
R34	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	SC101	QSOCN0860TAZZ		Socket, 8Pin	AE
R35	VRS-CZ1JF333D	33k	1/16W Metal Oxide	AB	SC102	QSOCN2471TAZZ		Socket, 24Pin	AE
R36	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB	SC103	QSOCN2072TAZZ		Socket, 20Pin	AD
R37	VRS-CZ1JF102D	1k	1/16W Metal Oxide	AA	SC551	QSOCN2071TAZZ		Socket, 20Pin	AD
R38	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	DUNTK2936QA00 HEAD AMP UNIT				
R39	VRS-CZ1JF333D	33k	1/16W Metal Oxide	AB					
R40	VRS-CZ1JF153D	15k	1/16W Metal Oxide	AB					
R41	VRS-CZ1JF223D	22k	1/16W Metal Oxide	AB					
R100	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA					
R102	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	INTEGRATED CIRCUITS				
R103	VRS-CZ1JF153D	15k	1/16W Metal Oxide	AB	IC301	VHiCXA2032Q-1		CXA2032Q, Head Amp Process	AN
R104	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA	IC3701	VHiLB11952W-1		LB11952W	
R105	VRS-CZ1JF244D	240k	1/16W Metal Oxide	AA	TRANSISTORS				
R106	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA	Q302	VS2SC5384C/-1		2SC5384C	AB
R107	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA	Q307	VS2SC5384C/-1		2SC5384C	AB
R108	VRS-CZ1JF563J	56k	1/16W Metal Oxide	AA	Q315	VS RN1704//I-1		RN1704	AC
R109	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA	Q341	VS2SA1037KQ-1		2SA1037KQ	AA
R110	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA	Q342	VS2SA1037KQ-1		2SA1037KQ	AA
R145	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	Q343	VSRT1N441U/-1		RT1N441U	AB
R149	VRS-CY1JF000J	0	1/16W Metal Oxide	AA	TRANSFORMERS				
R150	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	L303	VPCCM101K2R1N		Peaking, 100μH	AC
R551	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	L304	VPCCM470KR95N		Peaking, 47μH	
R552	VRS-CZ1JF133J	13k	1/16W Metal Oxide	AA	L305	VPCQM101K4R3N		Peaking, 100μH	AB
R553	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	L341	VPD9M100J1R7N		Peaking, 10μH	AC
R554	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	L342	VPD9M151J170N		Peaking, 150μH	
R555	VRS-TV1JD5R6J	5.6	1/16W Metal Oxide	AA	L3701	VPCCM4R7MR13N		Peaking, 4.7μH	AB
R556	VRS-TV1JD5R6J	5.6	1/16W Metal Oxide	AA	L3702	VPCCM4R7MR13N		Peaking, 4.7μH	AB
R557	VRS-TV1JD5R6J	5.6	1/16W Metal Oxide	AA	CAPACITORS				
R558	VRS-TV1JD5R6J	5.6	1/16W Metal Oxide	AA	C302	VCKYCZ1CB103K	0.01	16V Ceramic	AB
R559	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA	C304	VCKYCZ1CB103K	0.01	16V Ceramic	AB
R560	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA	C305	VCSATA1AJ156M	15	10V Tantalum	AD
R561	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	C306	VCSATA1AJ156M	15	10V Tantalum	AD
R562	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA	C309	VCKYCZ1CB103K	0.01	16V Ceramic	AB
R563	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA	C310	VCKYCZ1CB103K	0.01	16V Ceramic	AB
R564	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	C311	VCKYCZ1CB103K	0.01	16V Ceramic	AB
R565	VRS-CZ1JF912J	9.1k	1/16W Metal Oxide	AB	C313	VCKYCZ1CB103K	0.01	16V Ceramic	AB
R566	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	C314	VCKYCZ1CB103K	0.01	16V Ceramic	AB
R567	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA	C315	VCKYCY1CB104K	0.1	16V Ceramic	AB
R568	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	C318	VCKYCY1EB103K	0.01	25V Ceramic	AA
R569	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA	C319	VCKYCZ1CB103K	0.01	16V Ceramic	AB
R570	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	C320	VCKYCZ1CB223K	0.022	16V Ceramic	AC
R571	VRS-CZ1JF474J	470k	1/16W Metal Oxide	AA	C321	VCSATA1AJ156M	15	10V Tantalum	AD
R572	VRS-CZ1JF334D	330k	1/16W Metal Oxide	AA	C322	VCKYCZ1CB223K	0.022	16V Ceramic	AC
R573	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA	C323	VCKYCZ1CB103K	0.01	16V Ceramic	AB
R574	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA	C324	VCKYCZ1AB104K	0.1	10V Ceramic	AB
R575	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB	C325	VCSATA1AJ156M	15	10V Tantalum	AD
R576	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA	C326	VCKYCY1EB103K	0.01	25V Ceramic	AA
R577	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	C340	VCCCCZ1HH101J	100p	50V Ceramic	AB
R578	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	C341	VCCCCZ1HH151J	150p	50V Ceramic	AB
R579	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	C342	VCCCCZ1HH101J	100p	50V Ceramic	AB
R580	VRS-CZ1JF474J	470k	1/16W Metal Oxide	AA	C344	VCKYCY1CB104K	0.1	16V Ceramic	AB
R581	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA	C345	VCKYCZ1CB103K	0.01	16V Ceramic	AB
R582	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA	C346	VCKYCZ1HB102K	1000p	50V Ceramic	AB
R583	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	C347	VCSATA1AJ156M	15	10V Tantalum	AD
R584	VRS-CZ1JF272D	2.7k	1/16W Metal Oxide	AB	C349	VCCCCZ1HH680J	68p	50V Ceramic	AB
R585	VRS-CZ1JF153D	15k	1/16W Metal Oxide	AB	C3701	VCKYCZ1EB682K	6800p	25V Ceramic	AB
R586	VRS-CZ1JF244D	240k	1/16W Metal Oxide	AA	C3702	VCKYCZ1EB682K	6800p	25V Ceramic	AB
R587	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	C3703	VCKYCZ1AB104K	0.1	10V Ceramic	AB
R588	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	C3704	VCKYCZ1AB104K	0.1	10V Ceramic	AB
R589	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	MISCELLANEOUS PARTS				
	PSLDM3346TAFW		Shield						
	PSLDM3347TAFW		Shield						
FB101	RBLN-0056TAZZ		Balun, BLN-0056TA	AC					

Ref. No.	Part No.	★	Description	Code
C3705	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C3706	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C3707	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C3708	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C3709	VCKYCY1AF105Z	1	10V Ceramic	AC
C3710	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C3711	VCKYCY1AF105Z	1	10V Ceramic	AC
C3712	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C3713	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C3714	VCSATA1CJ106M	10	16V Tantalum	AD
C3715	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C3716	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C3717	VCKYCY1AF105Z	1	10V Ceramic	AC
C3718	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C3719	VCKYCZ1EB682K	6800p	25V Ceramic	AB
C3720	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C3721	VCKYCZ1EB682K	6800p	25V Ceramic	AB
C3722	VCKYCZ1EB682K	6800p	25V Ceramic	AB
C3723	VCKYCY1CF474Z	0.47	16V Ceramic	AB
C3724	VCKYCY1CF474Z	0.47	16V Ceramic	AB
C3725	VCKYCY1AF105Z	1	10V Ceramic	AC
C3726	VCKYCY1CF474Z	0.47	16V Ceramic	AB
C3727	VCCCCZ1HH101J	100p	50V Ceramic	AB
C3728	VCCCCZ1HH101J	100p	50V Ceramic	AB
C3729	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C3730	VCKYCZ1AB473K	0.047	10V Ceramic	AB
C3731	VCKYCZ1EB472K	4700p	25V Ceramic	AB
C3732	VCKYCZ1AB104K	0.1	10V Ceramic	AB
C3733	VCSATA1CJ106M	10	16V Tantalum	AD
C3734	VCSATA1CJ106M	10	16V Tantalum	AD

RESISTORS

R301	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R302	VRS-CY1JF273J	27k	1/16W Metal Oxide	AA
R303	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R305	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R307	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R308	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
R313	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA
R316	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R317	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R321	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R323	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R329	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R331	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R335	VRS-CY1JF273J	27k	1/16W Metal Oxide	AA
R337	VRS-CZ1JF181J	180	1/16W Metal Oxide	AA
R338	VRS-CZ1JF181J	180	1/16W Metal Oxide	AA
R340	VRS-CZ1JF680J	68	1/16W Metal Oxide	AB
R341	VRS-CZ1JF272D	2.7k	1/16W Metal Oxide	AB
R342	VRS-CZ1JF271J	270	1/16W Metal Oxide	AA
R343	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA
R344	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
R345	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R359	VRS-CY1JF105J	1M	1/16W Metal Oxide	AA
R360	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R361	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R362	VRS-CY1JF182F	1.8k	1/16W Metal Oxide	AA
R363	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R390	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R3701	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA
R3702	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R3703	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA
R3704	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R3705	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R3706	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R3707	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R3708	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R3715	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R3716	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R3717	VRS-TV1JD1R0J	1	1/16W Metal Oxide	AA
R3718	VRS-TV1JD1R0J	1	1/16W Metal Oxide	AA
R3719	VRS-TV1JD1R0J	1	1/16W Metal Oxide	AA
R3720	VRS-TV1JD1R0J	1	1/16W Metal Oxide	AA
R3721	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R3722	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R3723	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
R3724	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R3725	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R3726	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R3727	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R3728	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R3729	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
R3731	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R3732	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA
R3733	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA

MISCELLANEOUS PARTS

	PSLDM0106AJFW	Shield	
CN3701	QSOCN1085TAZZ	Socket, 10Pin	AE
CN3702	QSOCN1560TAZZ	Socket, 15Pin	AE
CN3703	QSOCN1871TAZZ	Socket, 18Pin	
SC301	QSOCN0985TAZZ	Socket, 9Pin	AE
SC304	QSOCN0671TAZZ	Socket, 6Pin	AC
SC305	QCNCW7068TAZZ	Connector, 70Pin	AG

**DUNTK2800PM03
CCD UNIT****INTEGRATED CIRCUIT**

IC2	VHiM24C08W6-1	M24C08W6, E ² PROM	AH
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TRANSISTOR

Q1	VS2SC4627CD-1	SC4627CD	AB
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CAPACITORS

C1	VCKYCY1HB102K	1000p	50V Ceramic	AA
C2	VCCCCY1HH2R0C	2p	50V Ceramic	AA
C3	VCKYTV1HF103Z	0.01	50V Ceramic	AA
C4	VCCCCY1HH221J	220p	50V Ceramic	AA
C5	VCKYTV1CF225Z	2.2	16V Ceramic	AB
C6	VCKYCY1HF103Z	0.01	50V Ceramic	AA

RESISTORS

R1	VRS-CY1JF105J	1M	1/16W Metal Oxide	AA
R2	VRS-CY1JF101J	100	1/16W Metal Oxide	AA
R3	VRS-CY1JF472J	4.7k	1/16W Metal Oxide	AA
R4	VRS-CY1JF101J	100	1/16W Metal Oxide	AA
R5	VRS-CY1JF105J	1M	1/16W Metal Oxide	AA

MISCELLANEOUS PART

SC1	QSOCN1986TAZZ	Socket, 19Pin	AF
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Ref. No.	Part No.	★	Description	Code
MECHANISM PARTS				
300	LCHSM0163GEZZ		Main Chassis Ass'y	AW
301	NGERH1280GEZZ		Main Cam	AD
302	NGERH1281GEZZ		Sub-Cam	AD
303	MLEVF0470GEFW		Eject Lever	AD
304	MLEVF0492GEFW		M Function Lever	AF
305	LHLDZ1966GEZZ		L Block Holder	AD
306	NGERW1064GEZZ		Worm Pulley	AC
307	NGERW1065GEZZ		Worm	AD
308	NGERH1282GEZZ		Worm Wheel	AC
309	NGERH1283GEZZ		Lo Relay Gear	AC
310	MARMM0126GEZZ		S Lo Arm Ass'y	AF
311	MARMM0128GEZZ		T Lo Arm Ass'y	AG
312	LANGA0069GEFW		S Lo Arm Retainer	AD
313	PGiDM0146GEZZ		Sup Rail	AD
314	PGiDM0171GEZZ		Tu Rail	AD
315	NGERH1284GEZZ		Sup Lo Gear	AC
316	NGERH1285GEZZ		Tu Lo Gear	AC
317	MSPRD0167GEZZ		S Lo Arm Double-Acting Spring	AE
318	MSPRT0407GEZZ		T Lo Arm Double-Acting Spring	AC
319	MLEVP0310GEZZ		HC Lever Ass'y	AF
321	MSLiF0074GEFW		Ten Arm Operation Lever	AD
322	PGiDM0148GEZZ		Ten Arm Guide	AC
323	NGERH3061GEZZ		Segment Gear	AD
324	MLEVF0472GEZZ		Tu Guide Ass'y	AC
325	PGiDP0027GEZZ		Tu Guide	AE
326	MSPRC0183GEZZ		Tu Guide Spring	AA
327	MSPRC0184GEZZ		Si Roller Spring	AA
328	MSPRC0208GEZZ		Tu Guide Lever Spring	AC
329	CCHSS0049GE01		Slide Chassis Ass'y	AR
330	MLEVF0495GEZZ		Ten Arm Ass'y	AC
331	LBNDK3023GEZZ		Ten Band Ass'y	AF
332	NiDR-0016GEZZ		Swing Gear Ass'y	AF
333	NGERH1286GEZZ		Driving Gear	AC
334	NGERH1287GEZZ		Pulley Gear	AD
335	NPLYV0157GEZZ		Relay Pulley	AD
336	MLEVP0284GEZZ		S Brake	AC
337	NGERH1288GEZZ		Tu Brake Gear	AC
338	MLEVP0285GEZZ		Tu Main Brake	AC
339	MLEVP0286GEZZ		Tu Sub-Brake	AC
340	MSPRD0169GEZZ		Tu Brake Spring	AD
341	LHLDZ2053GEZZ		Light Guide Holder Ass'y	AF
342	LANGG9102GEFW		Down Guide	AF
343	MSPRT0408GEZZ		Tension Spring	AD
344	MSPRD0186GEZZ		S Brake Spring	AD
345	CDRMU0032GE01		Upper Drum Ass'y	BF
346	PGiDM0154GEZZ		Tape Guide	AB
348	QBRSK0039GEZZ		Earth Spring	AD
349	PGiDM0143GEZZ		Drum Base	AG
350	DDRML0020HE01		Lower Drum Ass'y	AY
351	RMOTP1137GEZZ		Drum Motor	AS
352	PSPAQ0010GEZZ		Gap Adjusting Shim	AC
353	NRTTR-0096GEZZ		R Tr Rotor Ass'y	AP
354	MSPRC0209GEZZ		Gr Adjusting Spring	AC
355	LPOLM0058GEZZ		S Pole Base	AK
356	LPOLM0059GEZZ		T Pole Base	AK
357	NDAiV1071GEZZ		Sup Reel Support	AG
358	NDAiV1072GEZZ		Tu Reel Support	AG
359	MLEVF0517GEZZ		Pinch Lever Ass'y	AS
360	NBLTT0012GEZZ		Timing Belt S	AE
361	NBLTT0013GEZZ		Timing Belt L	AE
362	NROLP0127GEZZ		Guide Roller Ass'y	AG
363	NROLP0129GEZZ		Si Roller Ass'y	AG
364	QPWBH5428GEZZ		Mode FPC	AK
365	CPWBN5877GE01		Sensor Ass'y	AT
366	QSW-M0042GEZZ		Recognition SW	AH
367	RDTCH0037GEZZ		Dew Sensor	AF
368	RMOTV1020GEZZ		Capstan Motor	AZ
369	RMOTM1075GEZZ		Load. Motor	AL
370	QSW-R0038GEZZ		Mode SW	AG
372	DUNTK2936QA00		H/A PWB	—

Ref. No.	Part No.	★	Description	Code
374	TLABH0584GEZZ		Caution Label	AB
375	PSHEM0014GEZZ		Counter Balance	AC
376	PSHEP0013GEZZ		Interruption Sheet	AC
200	XAPSF17P03200		Screw M1.7x3.2	AA
201	LX-XZ3036GEFP		Screw M2.0x6.0	AD
202	LX-BZ3175GEFN		Screw M1.7x4.0	AC
203	LX-BZ3163GEFN		Screw M1.7x2.5	AC
204	LX-HZ3074GEFN		Screw M1.7x5.3 S Tight	AA
205	LX-BZ3177GEFF		Screw M1.4x1.5	AB
206	LX-BZ3132GEFF		Screw M1.4x1.5xD3.5	AA
207	LX-BZ3178GEZZ		Screw M1.4x1.5xD4.0	AD
208	LX-HZ3083GEFF		Screw M1.4x2.5 S Tight	AB
209	LX-HZ3077GEFN		Screw M1.4x3.0 S Tight	AA
211	LX-HZ3084GEFF		Screw M1.4x4.0 S Tight	AC
212	LX-HZ3116GEFD		Screw M1.4x3.2 S Tight	AB
213	LX-NZ3053GEZZ		Screw M1.4 Nut	AC
214	LX-WZ1076GE02		Washer D0.8xD3.0x0.2t	AA
			Plastics	
215	LX-WZ1075GE02		Washer D2.1xD5.0x0.25t	AA
			Plastics	
216	XWHJZ12-02040		Washer D1.2xD4.0x0.25t	AC
			Plastics	
217	QCNW-1714TAZZ		Ground Lead Wire	AC

CABINET PARTS LIST

1	DCABA6183LM01	V Frame Service	AL
		(A10U/UC/UA/UW/AH30U/UC)	
1	DCABA6183LM05	V Frame Service(A10K)	
1	DCABA6183LM02	V Frame Service	
		(A10T/AH30T)	
1-2	PSPAG0095TAZZ	VCR Lid Cushion	AA
1-3	TLABH0355TAZZ	Lithium Label	AB
		(A10U/UC/UA/UW/AH30U/UC)	
1-3	TLABH0412TAZZ	Lithium Label(A10K)	
1-3	TLABH0259TAZZ	Lithium Label(A10T/AH30T)	AD
1-4	LHLDB1027TAZZ	Lithium Holder	AD
2	DCABB6216LM01	L Cabinet Service	AS
		(AH30U/UC)	
2	DCABB6219LM01	L Cabinet Service	
		(A10U/UC/UA/UW)	
2	DCABB6229LM01	L Cabinet Service(A10K)	
2	DCABB6221LM01	L Cabinet Service(AH30T)	
2	DCABB6225LM01	L Cabinet Service(A10T)	
2-2	QEARP0262TAFW	LCD Earth Panel	AE
2-3	TLABH0318TAZZ	Turn Caution Label	AB
		(A10U/UC/UA/UW/AH30U/UC)	
2-3	TLABH0326TAZZ	Turn Caution Label	AB
		(A10T/AH30T)	
2-3	TLABH0412TAZZ	Turn Caution Label(A10K)	
2-4	GCOVH1251TASA	Jack Cover	AD
2-5	GCOVA1535TAZZ	Remote Control Receptor	AD
		Cover	
2-6	GCOVA1648TAZZ	LED Cover	AC
3	CCABC6090TAK7	Camera Front Cabinet	AR
		Ass'y	
3-2	GCOVA1654TASA	Hood Cover	AF
3-3	GCOVA1653TASA	Lens Hood	AK
4	DCABD6104LM02	Camera Rear Cabinet	
		Service(A10U/UC/UA/UW)	
4	DCABD6111LM02	Camera Rear Cabinet	
		Service(A10K)	
4	DCABD6104LM01	Camera Rear Cabinet	AP
		Service(AH30U/UC)	
4	DCABD6106LM01	Camera Rear Cabinet	
		Service(AH30T)	
4	DCABD6106LM02	Camera Rear Cabinet	
		Service(A10T)	
4-2	JBNTN-0276TASA	Camera Button	AD
		(A10U/UC/UA/UW/T/K)	
4-2	JBNTN-0276TASB	Camera Button(AH30U/UC)	AF

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
5	DFTAC1304LM01		VCR Lid Service (A10U/UC/UA/UW/T/K)		20	DUNTK2949QA12		VCR Unit(A10K)	—
5	DFTAC1302LM01		VCR Lid Service (AH30U/UC/T)	AS	21	DUNTK2934QA00		CAMERA Unit	—
5-2	HDECP0057TASA		VCR Lid Decoration Plate (A10U/UC/UA/UW/T/K)		22	QPWBH2937TAZZ		Tilt FPC	
5-2	HDECP0055TASA		VCR Lid Decoration Plate (AH30U/UC/T)	AE	23	LHLDW1038TA00		FPC Holder	AC
5-3	LANGK0533TAFF		VCR Lid Spring Angle	AC	24	RUNTK0353TAZZ		VCR Operation Unit (A10U/UC/UA/UW/K/AH30U/UC)	AS
5-4	LANGK0400TAFW		Eject Fitting	AD	24	RUNTK0369TAZZ		VCR Operation Unit (A10T/AH30T)	
5-5	MSPRD0070TAFJ		VCR Lid Spring		25	QTANZ0146TAZZ		Battery Terminal Unit	AK
6	DCOVA1647LM01		Camera Side Cover Service AR (A10U/AH30U)		26	QSW-Z0285TAZZ		Power/Zoom Unit	AR
6	DCOVA1647LM02		Camera Side Cover Service (A10UC/AH30UC)		27	LHLDZ1452TAZZ		Power Lock Holder	AC
6	DCOVA1647LM03		Camera Side Cover Service (A10UA/UW)		28	MSPRC0083TAFJ		Power Lock Spring	AA
6	DCOVA1647LM04		Camera Side Cover Service (A10T/AH30T)		29	JBNTN-0277TASA		Power Button (A10U/UC/UA/UW/T/K)	AD
6	DCOVA1647LM05		Camera Side Cover Service (A10K)		29	JBNTN-0277TASB		Power Button (AH30U/UC/T)	AF
6-2	NSFTZ0049TAFW		Battery Lid Axle	AC	30	LHLDZ1451TAZZ		Power Holder	AC
6-3	MSPRD0050TAFJ		Battery Lid Open/Close Spring	AC	31	JKNBP0152TASA		Power Knob	AD
6-4	TLABH0264TAZZ		Recycling Label (A10U/AH30U)	AB	32	JKNBP0153TASA		Zoom Knob (A10U/UC/UA/UW/T/K)	AD
6-4	TLABH0317TAZZ		Recycling Label (A10UC/AH30UC)	AC	32	JKNBP0153TASB		Zoom Knob(AH30U/UC/T)	AF
6-5	GFTAB1066TAKA		Battery Lid	AE	33	LHLDZ1453TASA		Zoom Knob Holder	AD
6-6	HDECP0045TASA		Battery Decoration Plate (A10U/UC/UA/UW/AH30U/UC)	AC	34	JKNBP0154TASA		Open Knob	AC
6-6	HDECP0047TASA		Battery Decoration Plate (A10T/AH30T)	AC	35	PSPAZ0191TAZZ		Microphone Spacer	AA
6-6	HDECP0070TASA		Battery Decoration Plate (A10K)		36	RMICC0090TAZZ		Microphone	AN
6-7	MSPRC0102TAFJ		Battery Lock Lever Spring	AA	37	MSPT0034TAFJ		Lid Lock Spring	AC
6-8	MLEVP0030TASA		Battery Lid Open/Close Lever	AC	38	LHLDZ1454TA00		Lid Lock	AD
6-9	LHLDZ1532TAZZ		Battery Lock Holder	AC	39	NSFTZ0084TAFW		VCR Lid Shaft	AD
6-10	MLEVP0044TASA		Battery Lock Lever	AC	40	PSPAZ0318TAZZ		Microphone Ware Spacer	
6-11	MSPRC0101TAFJ		Battery Push-out Spring	AD	41	LHLDZ1450TAZZ		Speaker Holder	AC
6-12	LHLDZ1445TAZZ		Lens Holder	AD	42	VSP0020P-A7WN		Speaker	
6-13	LANGK0398TA00		Battery Lid Angle Fitting	AH	43	PSPAG0103TAZZ		Speaker Spacer	AC
6-14	UBNDT0122TAZZ		Hand Strap	AH	46	DCOVA3056LM01		Speaker Cover	AE
7	DCOVA1650LM01		Tilt Service	AP	47	PSPAH0031TAZZ		Wire Holder	
7-2	PSPAZ0190TAZZ		Tilt Spacer	AE	48	QSW-Z0342TAZZ		Turn/Eject SW	
7-3	GCOVA1537TAKA		Tilt Frame V	AL	49	MLEVP0031TAZZ		Eject Lever	AC
7-4	PSPAZ0189TAZZ		Rotation Spacer	AD	50	LANGK0399TAZZ		Tripod Angle	
7-5	LANGH0071TAFW		Stopper Fitting	AD	51	PSHEP0160TAZZ		Microphone Lead Sheet	AC
8	LHLDZ1533TAZZ		LCD Holder	AH	52	RUNTK0354TAZZ		Lithium Unit	AF
9	PSHEP0044TAZZ		Prism Sheet	AG	54	GCOVA1651TAKA		Microphone Cover	
10	PSHEP0045TAZZ		Diffusion Sheet	AD	55	QPWBH2815TAZZ		CCD FPC	AE
11	PGiDM0037TAZZ		Light Guide Plate	AG	56	CCOVA1652LM01		AV Unit Cover Service (A10U/UC/UA/UW/K/AH30U/UC)	AD
12	PMiR-0021TAZZ		Reflection Sheet	AC	56-2	HiNDP0214TASA		AV Unit Cover Service (A10T/AH30T)	
13	CLMPV0048RM05		Lamp Inverter Unit		56-2	HiNDP0223TASA		Video Indication Panel (A10U/UC/UA/UW/K/AH30U/UC)	
14	CPNLC0047RM04		LCD Panel		57	GCOVA1649TASA		Video Indication Panel (A10T/AH30T)	
15	PZETV0343TAZZ		LCD Lead Sheet	AA	58	RUNTK0352TAZZ		Adjust Hole Cover	
17	TLABM2063TAZZ		Model Label(AH30UC)		59	RUNTK0356TAZZ		AV Jack Unit	AS
17	TLABM2067TAZZ		Model Label(AH30U)	AD	60	PSHEP0159TAZZ		6-cell Detection Unit	
17	TLABM2072TAZZ		Model Label(A10U)		61	TLABZ0501TAZZ		Wire Fix Sheet	AB
17	TLABM2073TAZZ		Model Label(A10UC)		62	PSPAZ0331TAZZ		Label(A10K)	
17	TLABM2079TAZZ		Model Label(A10UW)		a	LX-HZ0018TAFN		Microphone Spacer	
17	TLABM2080TAZZ		Model Label(A10UA)		b	LX-HZ0018TAFF		M2x6 Tapping, Silver	AA
17	TLABM2083TAZZ		Model Label(AH30T)		c	LX-HZ0045TAFN		M2x6 Tapping, Black	AA
17	TLABM2103TAZZ		Model Label(A10T)		d	XiPSF20P04000		M2x4 Tapping, Silver	AA
17	TLABM2109TAZZ		Model Label(A10K)		e	LX-BZ0191TAFD		M2x4 Small Screw, Black	AA
18	CLNSA0127TA01		Lens Unit	BS	f	XiPSD20P03000		Zinc Plating	
19	GFTAC1241TASA		Cassette Compartment Cover	AD	g	LX-UZ0016TAFD		M2 Special Screw	AC
20	DUNTK2949QA00		VCR Unit (AH30U/UC)	—	h	LX-UZ0016TAFD		M2x3 Screw	AA
20	DUNTK2949QA03		VCR Unit (A10U/UC/UA/UW)	—	i	LX-BZ0200TAFD		M2x5 Special Screw	AA
20	DUNTK2949QA05		VCR Unit(A10T)	—	k	XiPSN20P04000		M2x7 Special Screw	AB
20	DUNTK2949QA06		VCR Unit(AH30T)	—		LX-HZ0063TAFD		M2x4 Small Screw, Silver	AA
								M1.7x6 Tapping, Silver	AA

Ref. No.	Part No.	★	Description	Code
CASSETTE HOUSING PARTS				
400	CHLDX3077GE01		Cassette Compartment Ass'y	AY
401	MSPRT0414GEZZ		Up Main Spring	AD
402	MROD-0014GEFJ		Damper rod	AG
403	PDMP-0013GEZZ		Cassette Compartment Damper	AG

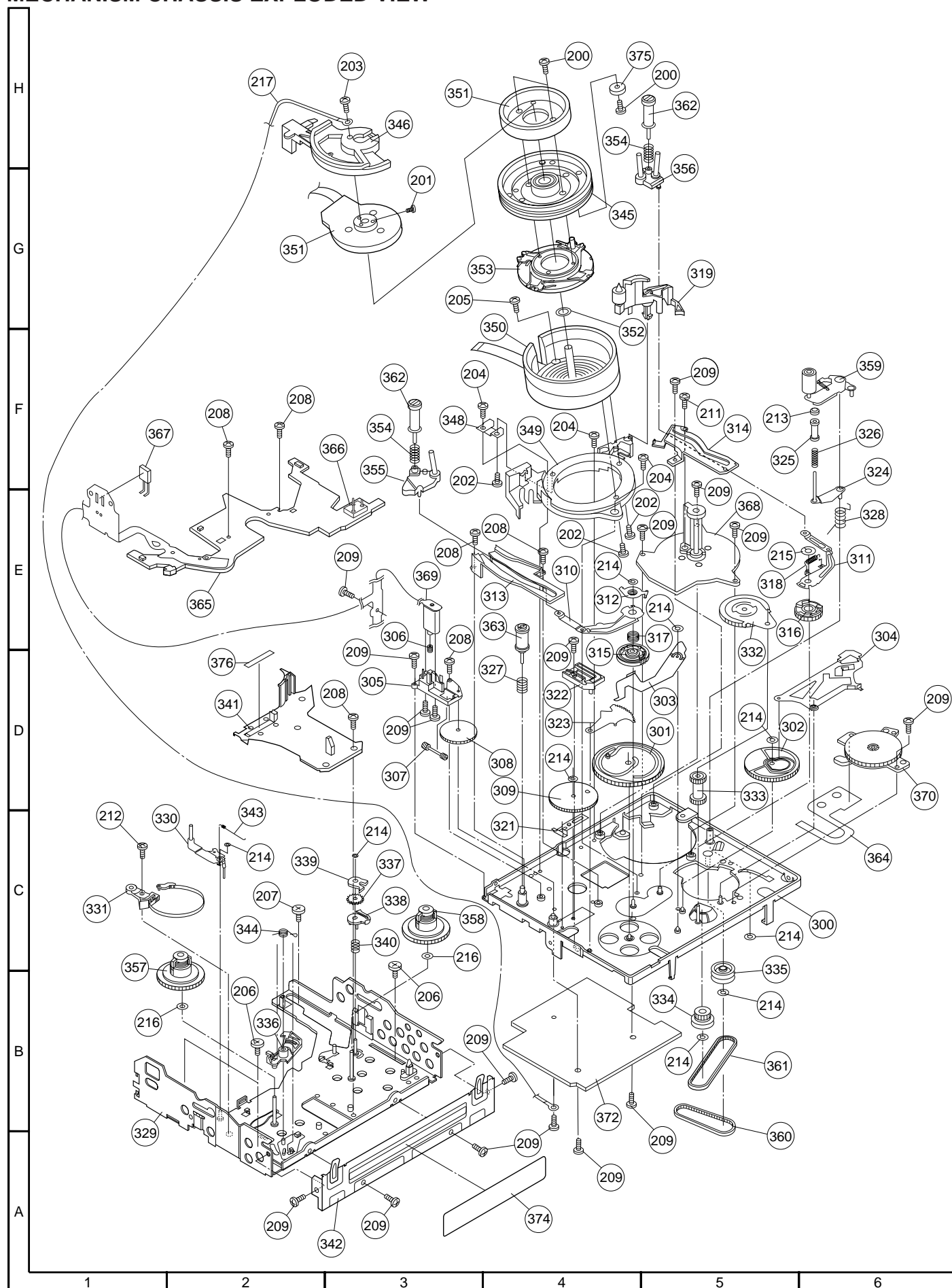
CAMERA UNIT PARTS				
1	PCOVM8016TA00		Dustproof Rubber	AC
2	LANGK0324TAFW		CCD Retaining Plate	AG
3	PFIW0060TAZZ		Optical Filter	AS
4	VHILZ2413H5-1		CCD Sensor	BE
5	DUNTK2800PM03		CCD PWB Unit	—
6	LX-HZ0013TAF		Screw (1.7 X 6)	AA

Ref. No.	Part No.	★	Description	Code
SUPPLIED ACCESSORIES				
ACCESSORIES				
⚠	GCOVH1225TASA		Lens Cap	AG
	QACCB0016TAZZ		AC Cord(A10UW)	AV
⚠	QACCK0002TAZZ		AC Cord(A10UA)	AM
	QCNW-1448TAZZ		A/V Cable	AH
	or			
	QCNW-1295TAZZ		A/V Cable	AK
	RRMCG0084TASA		Infrared Remote Control (AH30U/UC)	AN
	RRMCG0085TASA		Infrared Remote Control (A10U/UC/UA/UW)	AN
	RRMCG0086TASA		Infrared Remote Control (AH30T)	
	RRMCG0087TASA		Infrared Remote Control (A10T)	
	TiNS-6030TAZZ		Operation Manual(AH30T)	
	TiNSE0358TAZZ		Operation Manual (AH30U)	AF
	TiNSE0360TAZZ		Operation Manual (A10U/UA/UW)	
	TiNS-6032TAZZ		Operation Manua (A10T)	
	TiNSL0214TAZZ		Operation Manual(AH30UC)	
	TiNSL0215TAZZ		Operation Manual(A10UC)	
	TCAUH0262TAZZ		Ferrite Core Install Manual (A10U/UC/AH30U/UC)	AC
⚠	UADP-0312TAZZ		AC Adapter(A10U/UC/T/ AH30U/UC/T)	
⚠	UADP-0313TAZZ		AC Adapter (A10UA/UW)	BD
	UBNDS0010TASA		Shoulder Strap	AH
	UBATL0011TAZZ		Lithium Battery	AE
	UBATM0010TA01		Battery(A10U/AH30U)	
	UBATM0011TA01		Battery(A10UC/UA/UW/T/ AH30UC/T)	
	UBATU0247AJZZ		AA Size Battery(x2)	AE
	RCORF0038TAZZ		Ferrite Core Large (A10U/UC/AH30U/UC)	AK
	RCORF0083CEZZ		Ferrite Core Small (A10U/UC/AH30U/UC)	AL

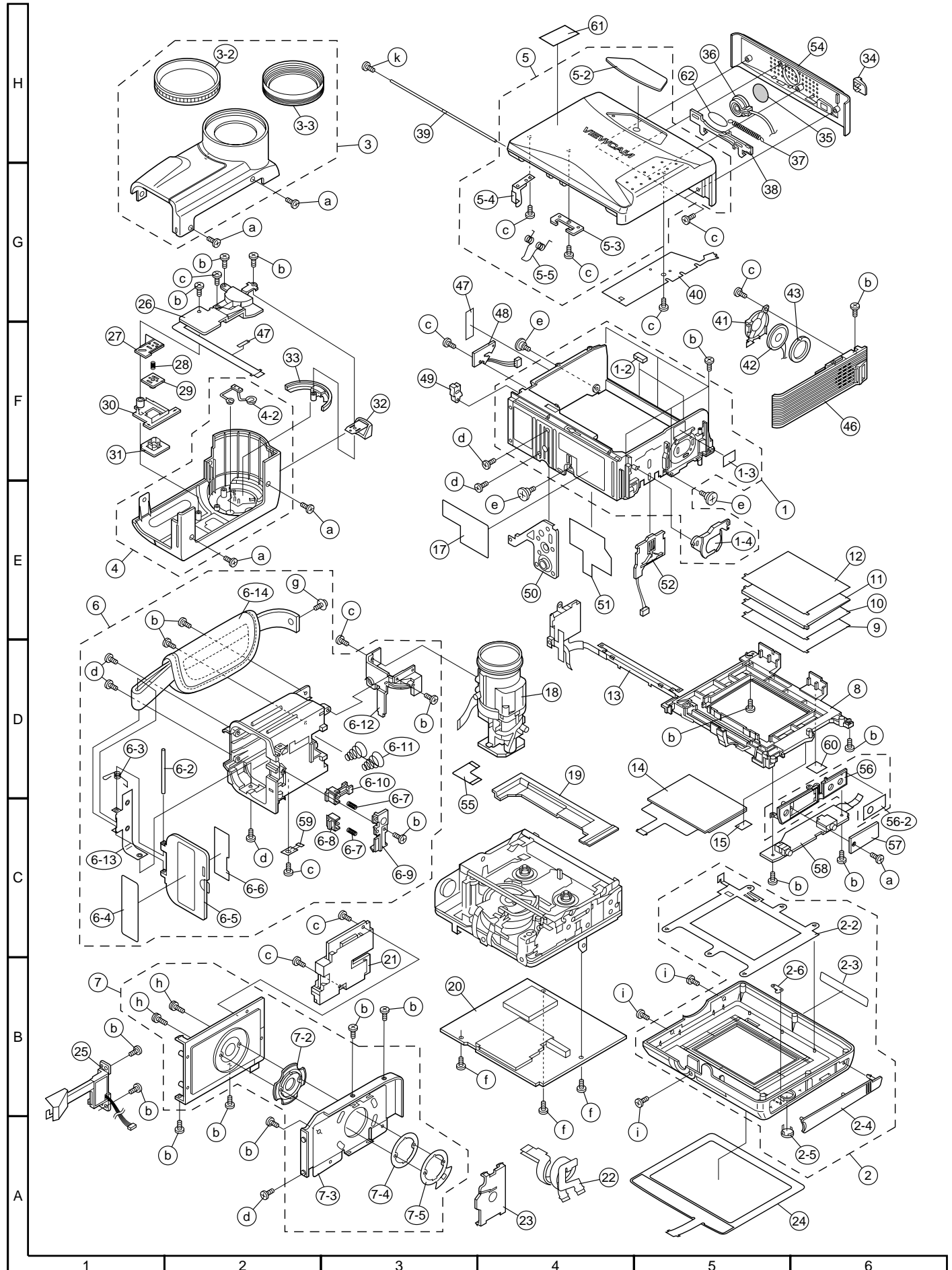
ACCESSORIES		
(NOT REPLACEMENT ITEM)		
TGANE0071TAZZ	Guarantee Card (A10U/AH30U)	
TGANZ0027TAZZ	Guarantee Card (A10T/AH30T)	
TGANZ0024TAZZ	Guarantee Card (A10UC/AH30UC)	

Ref. No.	Part No.	★	Description	Code
PACKING PARTS (NOT REPLACEMENT ITEM)				
	SPAKC7488TAZZ		Packing Case (AH30U/UC)	
	SPAKC7502TAZZ		Packing Case (A10U/UC/UA/UW)	
	SPAKC7515TAZZ		Packing Case(AH30T)	
	SPAKC7533TAZZ		Packing Case(A10T)	
	SPAKC7538TAZZ		Packing Case(A10K)	
	SPAKP6123TAZZ		Wrapping Paper (A10U/UC/UA/UW/T/AH30U/UC/T)	
	SPAKP6129TAZZ		HOSO-PP (A10U/UC/AH30U/UC)	
	SSAKA0105TAZZ		Polyethylene Bag (A10U/UC/UA/UW/T/AH30U/UC/T)	
	SPAKA6343TAZZ		Packing ADD.	—
	SPAKA6344TAZZ		Packing ADD.	—
	SPAKA6345TAZZ		Packing ADD.	—
	SPAKF0266TAZZ		AC Adapter Packing	—

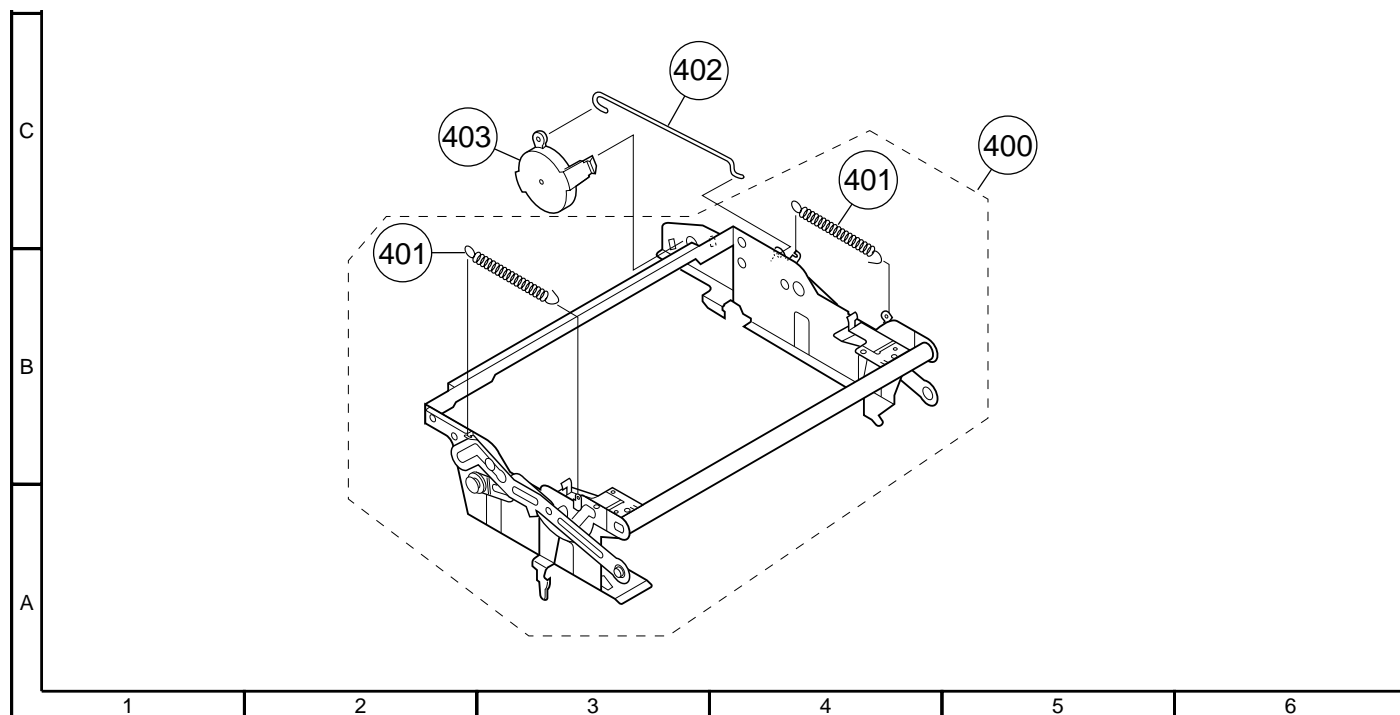
MECHANISM CHASSIS EXPLODED VIEW



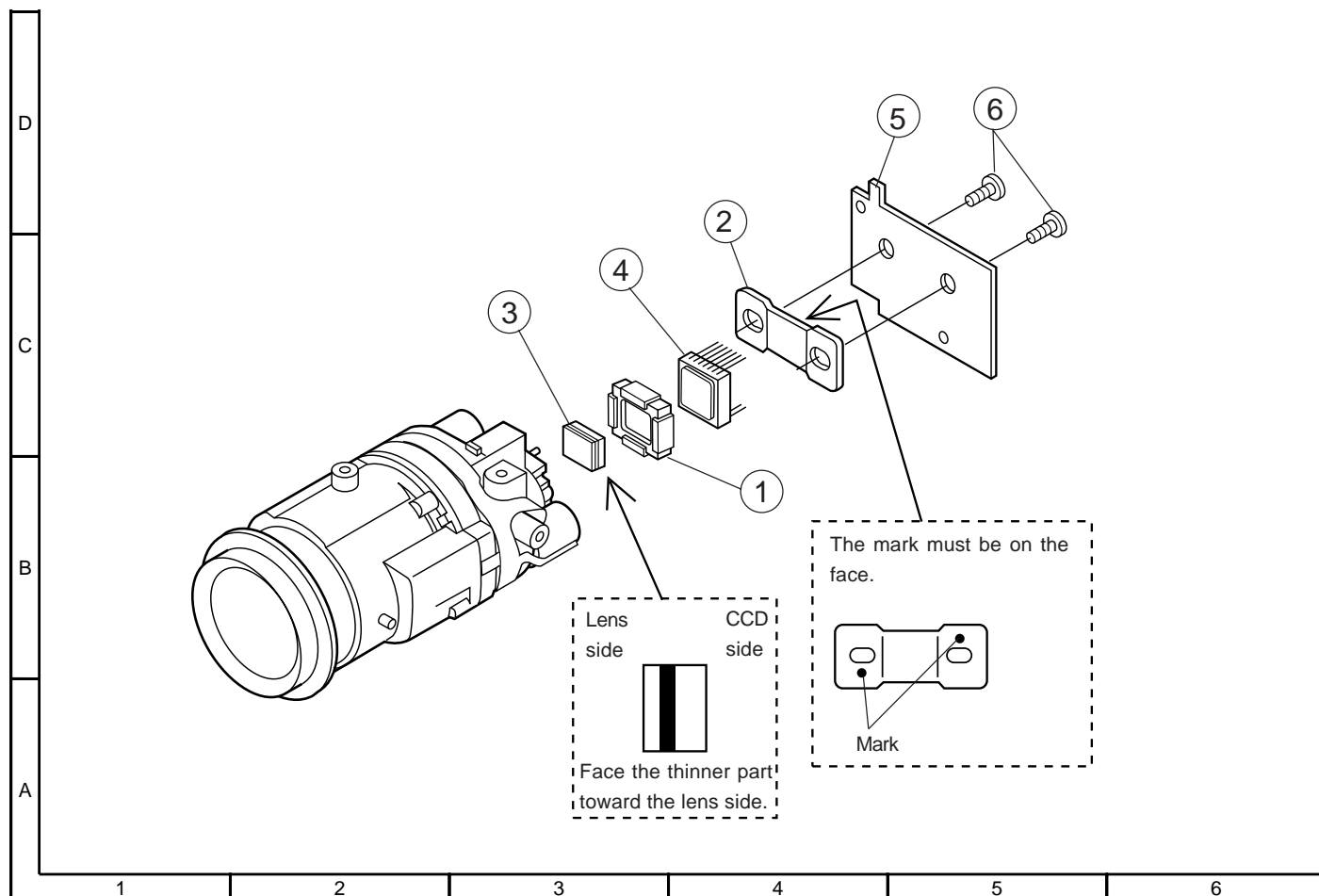
CABINET EXPLODED VIEW



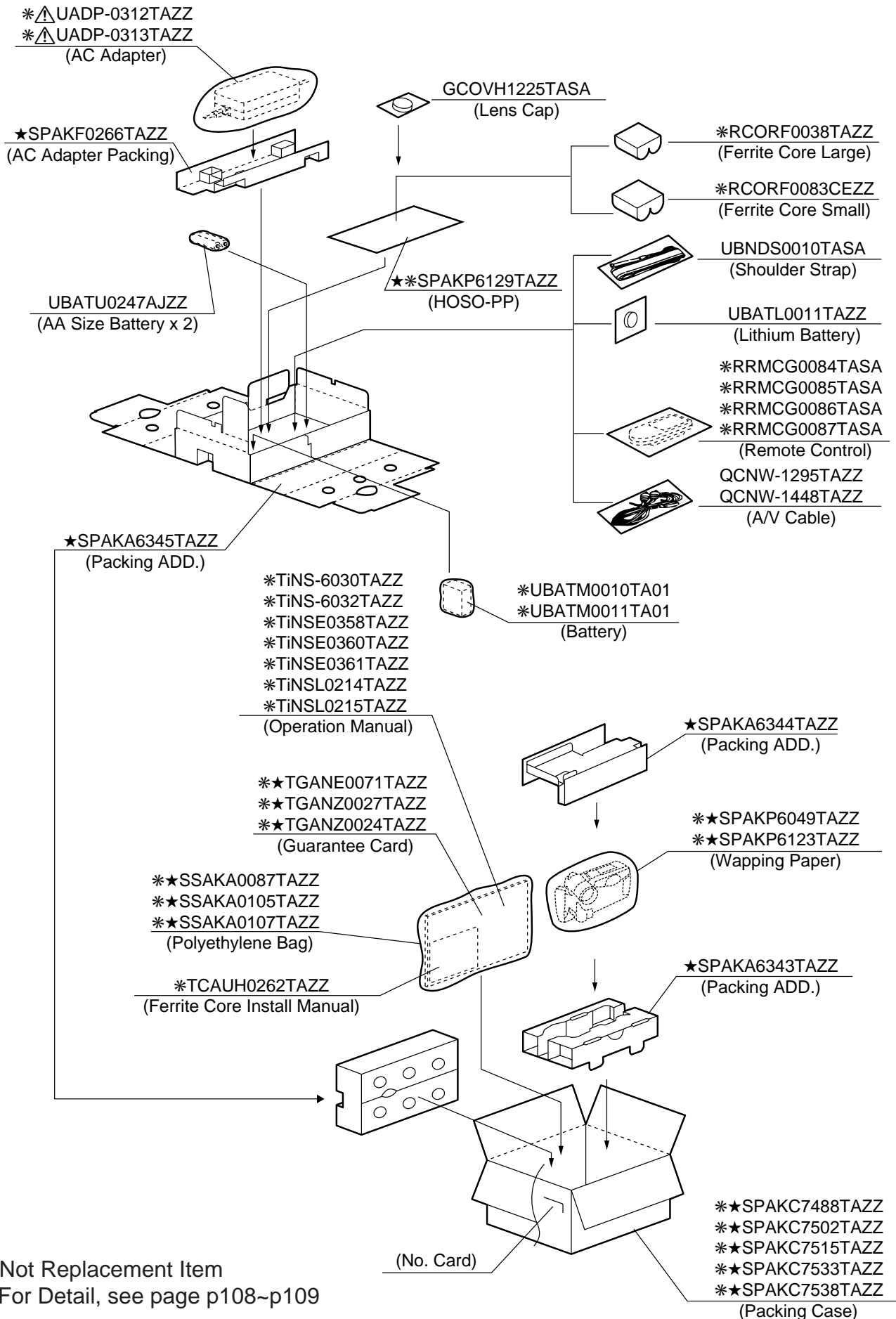
CASSETTE HOUSING CONTROL UNIT EXPLODED VIEW



CAMERA UNIT EXPLODED VIEW



12. PACKING OF THE SET



★ Not Replacement Item
 * For Detail, see page p108~p109

- M E M O -

This image shows a full page of white paper with horizontal dashed lines, typical of primary-ruled notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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